

Of post-impressionistic ex-  
tractions, Valeria Alexu's paint-  
ing (Chimul Arici gallery, pro-  
and floor, Bucharest) surprises  
nevertheless the statue of di-  
rection through reflexive sug-  
gestion and the refusal of an  
"explicit" lyrical sincerity, thus  
acting as professor of the insti-  
tute. Calul Neetan and Alexan-  
dra Cluceru, the artist bor-  
rowed from them, but, always  
tented to defiant "territories"  
and a personal style. Lyrica  
sensitivity and the temptations  
of decorativeness were con-  
stantly conquered by a medita-  
tive expression. Her landscapes  
and still lifes as well as her  
portraits have a remarkable  
compositional coherence, with  
an equilibrated dosing of ef-

fects. The painter follows a  
strict programme, where chro-  
matic richness — showing at  
the same time exuberance and  
affective temperature, vigour  
and discretion — reveals an  
original stylistic horizon. It is  
clear that, in the dialogue with  
nature, Valeria Alexu tries to  
extract deeper meanings, reveal-  
ing the inner dynamics of  
styles. Thus her "transcribed"  
through an effect of personal  
stylization, "signs" of an ex-  
tremely problematic and per-  
spective. In this context, the  
artist subtly approaches an an-  
alogy of feelings, bringing out,  
from various angles, deeply hu-  
man, existential significances.  
V. UDRESCU



Photos: Portrait of a Woman, The Old  
House, Lowi with Roses (top); study —  
Portrait of a Peasant, Woman with Turban  
(right); The Blue Flower (bottom); Woman  
on the Seashore, in the Studio, The Tem-  
pest (left); Autumn (centre, below); Ma-  
ritime Horizon (centre, above)



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# ROMANIAN NEWS

INFORMATION AND COMMENTARY WEEKLY PUBLISHED BY THE ROMANIAN NEWS AGENCY AGENCE

## PRESIDENT NICOLAE CEAUSESCU OPENED THE BUCHAREST INTERNATIONAL FAIR

The General Secretary  
of the Romanian Commu-  
nist Party, President of  
the Republic, Nicolae  
Ceaurescu, together  
with Elena Ceaurescu in-  
augurated the 14th edition  
of the Bucharest Interna-  
tional Fair at the exhibition  
centre in Scinteii Square  
on Wednesday, October 12.

The opening festivity of this  
event of great economic and  
commercial interest, which has  
become traditional, was attend-  
ed by full and alternate mem-  
bers of the Executive Political  
Committee of the CC of the  
RCP, secretaries of the Party  
Central Committee, members  
of the CC of the RCP, of the  
State Council and of the Gov-  
ernment, executives of central  
institutions, mass and public  
organizations.

Also present were diplomatic  
heads of mission accredited in  
Bucharest, the directors of the  
national pavilions and the re-  
presentatives of the foreign  
firms taking part in this year's  
fair, and foreign press corres-  
pondents.

In his opening speech, Ioan  
Vasile, Minister of Foreign  
Trade and International Econo-  
mic Cooperation, said among  
other things:

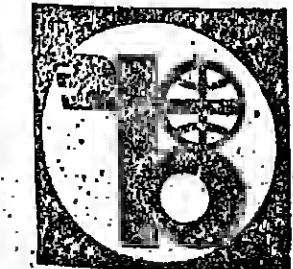
"The 14th edition of the Bu-  
charest International Fair, a  
prestigious event of economic  
life in our homeland, which car-  
ries wide international echo,  
is a new confirmation of social-  
ist Romania's policy of peace  
and collaboration with all the  
states of the world, regardless  
of their social system."

"The Bucharest International  
Fair provides not only a fruitful

(cont. on p. 3)



## TRADE-COOPERATION- DEVELOPMENT-PEACE

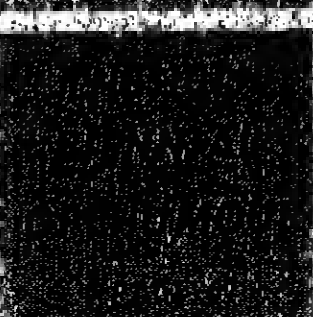


The 14th edition of the  
Bucharest International  
Fair, IIB '88, is attend-  
ed by 1,250 Romanian  
enterprises and foreign  
firms from 45 countries.  
The Romanian exhibits  
illustrate the great ac-  
chievements scored by  
Romania in oil fields of  
economic activity, the continuous growth of the power  
of the national economy, its capacity to create increas-  
ingly better products, to take part in the world ex-  
change of material and cultural assets at a compa-  
rable level. At the same time the Fair highlights Ro-  
mania's availability for expanding its commercial ex-  
changes, its wish to develop its collaboration and co-  
operation with all states. In this issue we continue to  
publish declarations made by directors of pavilions  
and businessmen who are attending the Fair.

(pages 4-5)

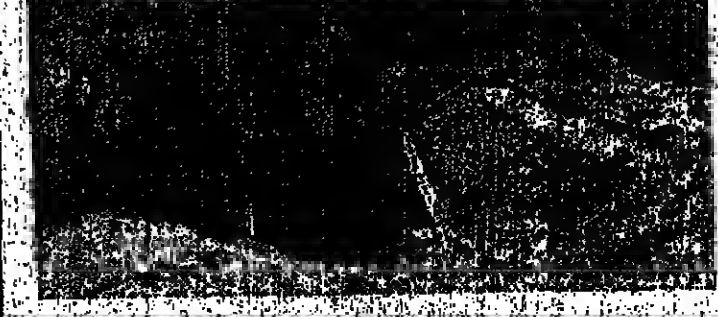
## INTERVIEW GRANTED BY NICOLAE CEAUSESCU TO NEW CHINA NEWS AGENCY

### CULTURAL NEWS



### EYEWITNESS

A photoreport made at the large hydro-power plant  
of Colibita, near the village bearing the same name,  
whose houses have been moved away to leave enough  
space for the construction of a storage lake (pag. 6)





## INTERVIEW GRANTED BY NICOLAE CEAUSESCU TO NEW CHINA NEWS AGENCY

Nicolae Ceausescu, General Secretary of the Romanian Communist Party, granted an interview to Zhang Hanwon, chief correspondent of the Bucharest office of the New China news agency. Below we reproduce the highlights of the interview.

Referring to the prospects of the Romanian-Chinese relations and his upcoming visit to China, President Nicolae Ceausescu said:

In the years of socialist construction, relations of collaboration and friendship have developed between the Socialist Republic of Romania and the Peoples Republic of China in all fields of activity.

One may say that the cooperation in economy, technology, science and other fields has grown powerfully, that it stands the test of several years of difficult periods — it may say so — and proved its durability given the fact that our parties and peoples have taken on the principle of equality, observance for national independence and sovereignty, noninterference in internal affairs and mutual advantage.

Starting from here and taking into consideration our countries' general development and their achievements in socialist construction, one may say that there are now and broad possibilities for the multilateral expansion of collaboration in production included.

To this end, our forthcoming visit to the Peoples Republic of China, our talks with comrades Zhao Ziyang and other members of the Party and state leadership of the Peoples Republic of China will undoubtedly help to further develop the collaboration and friendship between our parties and peoples. Approaching certain aspects of socialist construction in Romania, President Nicolae Ceausescu said:

I trust that the visit, the talks, the understanding we shall reach will open new and broad prospects in this direction, in accordance with the interests of the two parties and countries, as well as with the general interests of socialism, international collaboration and peace.

We have always started from the fact that socialism is built in conditions that differ from one country to another that there are no set models to be used. On this basis we have tried to apply the general principles of socialist construction to realities in Romania.

We have paid special attention to the continuous development of the state and cooperation between socialist countries, to using adequate material incentives in keeping with the socialist principle ensuring that the working people make ever higher incomes to accordance with each person's work and ability.

At the same time, we have consistently aimed at nobility of the principles of socialist ethics and equality, so as just possible higher-to-lower income ratio and we so to it that nobody makes unearned incomes, least by exploiting others' work.

At present, all Romanian people are engaged with all their forces in the implementation of the resolutions of the Thirteenth Congress and of the National Conference of the Party. The entire people are working to achieve the goals of the April theses regarding the modernization and improvement of all economic and social activities. We have set ourselves most resolutely to work to carrying into effect the measures for the organization and modernization of all activities in industry and the other sectors on the basis of the latest gains of science and technology, for the attainment of the goals of the new organic revolution and for the continuous improvement of the living standards of the people — materially and spiritually.

At the same time — starting from the fact that the Romanian achievements of science and technology development and knowledge in general are today a gain of the whole mankind —

we have set ourselves to raise markedly the people's level of training in general, to more powerfully develop science and culture, as we are of the opinion that it is only in this way that we will be able to attain humanity's development goals, successfully build the multilaterally developed socialist society, and put the conditions in place for our advance to communism.

Referring to various issues of international life, President Nicolae Ceausescu stressed that:

The international situation continues to be very complex and contradictory. Armies are taken as well as steps to solve some problems. Several accords were concluded, by the Soviet Union and the U.S.A. in particular, on shorter and medium range missiles. And steps were also taken in the direction of initiating a negotiated settlement of disputes. Nevertheless, the nuclear arms race has been going on, nuclear tests have continued, military spending has been rising in a series of areas which, undoubtedly, enhances the danger of another world war. In various zones of the world instances of interference in the domestic affairs of other states are recorded. The economic situation of the developing countries has seriously deteriorated. One may say that no radical change has been made yet, that there has been no clear tendency towards eliminating the policy of arms and threat of force, of renouncing the military way of solving various international issues.

That is why, in our opinion, different states, all countries, all peoples, all nations, all peoples should make greater efforts to radically change the course of events, impose a passage to new disarmament accords, to completely eliminate nuclear weapons and stop nuclear tests, for the renunciation of the so-called star wars and a passage to cuts in conventional arms, and the elimination of chemical and other weapons of mass destruction.

Starting from the particular role of Europe in the building of a climate of peace, collaboration and peace, Romania works consistently for a successful end of the Vienna Conference, for the conclusion of appropriate accords on disarmament, on the development of mutually advantageous economic, technical, scientific and other links, of a document which should give a new perspective to the growth of friendship and unyielding cooperation among all states of the continent.

We are for the transformation of the Balkans into a zone of peace, cooperation and good neighborliness, free from nuclear and chemical weapons, without foreign military bases, for the creation of buffer zones in northern and central Europe, just as in other parts of the world.

All these questions cannot be solved by just two or several states, it is only with the active participation of all states of the world, of all peoples, that they can be solved in a new way, in the interest of all nations.

Romanian measures are required for a definitive end to the policy of force, of interference in the domestic affairs of states, for the ensuring of peace, for the ensuring of relations of the principles of equal rights, respect for independence and sovereignty, non-interference in internal affairs.

New relations should be taken to solve the disputes in various parts of the world, only by means of negotiations. This applies to the Middle East, Indo-China and other regions of the world as well.

We are of the opinion that most resolute action should be taken to create the conditions for the development of the world's very high foreign debt included —, to establish

new international economic order.

Even though the problems are complex and grave, we believe that, by working in concert, the progressive, anti-imperialist forces, peoples everywhere can bring about a new, democratic policy of international peace and cooperation.

To this spirit, the Romanian Communist Party and the Socialist Republic of Romania will further work consistently to expand their relations with all socialist countries, with the developing countries, with the developed capitalist countries, taking an active part, alongside the other states and peoples, in the settlement of all problems concerning mankind at present.

I should like to note with satisfaction, on this occasion too, the cooperation between Romania and China, pronounced on their identical or rise stance on the major issues of the current international life, on the joint wish to strengthen their relations in the future and to express my belief that our two countries — alongside the other states, the progressive and peace-loving forces — will make an ever more important contribution to the firm assertion of the disarmament, cooperation, independence and peace policy.

## MEETING OF THE EXECUTIVE POLITICAL COMMITTEE

Gathered on October 11, under the chairmanship of the General Secretary of the Romanian Communist Party, Nicolae Ceausescu, the Executive Political Committee of the CC of the RCP examined and approved the program for the construction of the new power plant, the rational utilization of electric, thermal power and natural gas and the working conditions of economic and social units in this sector.

In keeping with the provisions of this programme, the Executive Political Committee requested the ministries and the local party and state bodies to take firm measures so that electric power plants should operate at especially and supply energy of maximum level to the end of a proper course of activity in economic units, in all areas.

It was set that in all industrial enterprises, with the exception of round-the-clock activity, steps be taken for an appropriate organization of shifts, of technological flows with a view to reducing electric energy consumption and strictly observing the approved consumption norms which shall be considered as maximal.

Trade, catering, health, social and administrative units shall have adequate working hours so that energy consumption should be as low as possible. As for individual and small-scale consumers, the need was stressed that all citizens most conscientiously observe the rules of energy conservation.

As regards the population's consumption of electric energy, at the proposal of Party General Secretary Nicolae Ceausescu, the Executive Political Committee approved a number of measures concerning the increase of the net power consumption and the reduction of some of their factors. According to these, the annual power consumption is increased differentially by number of rooms and the number of persons in a family by 15-18 per cent in urban areas and by 17-18 per cent in rural areas.

As for tariffs it was decided that the current 0.05 kWh unit be maintained for all increased net consumption.

Tariffs lower than the current ones are to be applied for what exceeds the new set power consumption. The new set power consumption of the conditions in which the tariffs are applied.

The Executive Political Committee also approved the activity carried out by President Nicolae Ceausescu during the visit of the way in which he set forth, during the talks, the stand of the Roman-

## RECEPTIONS BY THE PRESIDENT OF THE REPUBLIC

ENVOY OF THE PRESIDENT OF THE USA

On October 18, the President of the Socialist Republic of Romania, Nicolae Ceausescu, received John Whitehead, Deputy Secretary of State, the Envoy of the President of the United States, Ronald Reagan.

During the talks the guest set forth some considerations on the development of the American-Romanian relations.

President Nicolae Ceausescu set forth Romania's stand on the growth of the ties of cooperation between Romania and the other states and peoples, in the settlement of all problems concerning mankind at present.

ABDULLAH TENEKICI,  
Minister of State of Turkey

On October 11, Romania's President Nicolae Ceausescu received Abdullah Tenekici, Minister of State of Turkey, Chairman of the joint governmental commission of economic and technical cooperation between the Socialist Republic of Romania and the Republic of Turkey, the proceedings of which are held in Bucharest.

During the interview, emphasis was placed on the bond ties of friendship and collaboration between Romania and Turkey, and the wish was expressed to further develop them in keeping with the understandings concluded at top level in

the U.S.A., on the basis of the principles of full equality of rights, respect for national independence and sovereignty, non-interference in internal affairs and mutual advantage.

Reference was also made to some aspects of the international political situation, to the holding of the arms race in particular, to the danger to disarmament, in nuclear disarmament first and foremost, to the peaceful, negotiated settlement of the states of tension and conflict in the world.

Bucharest and Ankara. Reference was made to the special role of the joint governmental commission in the aim to best advantage the possibilities to expand and diversify the economic and technical-scientific cooperation, to increase commercial exchange, to bring into account the growing potential of the two countries' economies.

During the talk, the magnified development of Romanian-Turkish collaboration was stressed as an important contribution to the building of a climate of understanding and broad collaboration in the Balkans, in Europe and the world.

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Reference was also made to some aspects of the international political situation, to the holding of the arms race in particular, to the danger to disarmament, in nuclear disarmament first and foremost, to the peaceful, negotiated settlement of the states of tension and conflict in the world.

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# IS THERE A CULTURE OF HUMOUR?

THE "CONSTANTIN TĂNASE" BIENNIAL OF HUMOUR IN VASLUI AT ITS 10TH EDITION



Starting in 1970, Vaslui has been the host of a biennial festival of humor bearing the name of Constantin Tănase, one of the greatest comedians of the Romanian stage, who was born in this town. The festival started as an ordinary event spanning two or three days. In September 1976, at its fourth edition, it lasted 10 days, bringing together over one thousand guests, having a rich bill and engaging in the contest artistic brigades and individual performers coming from nearly all Romania's counties. This was obviously due to the popularity gained by the event along the years.

In September 1980, at its sixth edition, the participation of writers, theatrical people, caricaturists, amateur artists set a new record. The contest of crea-

tion in the realm of satire and humoristic literature organized by the local cultural forum jointly with the Writers' Union included in the list of humorous young playwrights, students, teachers, doctors, working people from the most varied fields of activity, all of them proving great originality and satirical sharpness. The caricature contest again brought in its spotlight experienced professionals just as young people from various counties. The contest of performers, artistic brigades and, for the first time, theatre companies brought before the jury over 1,000 artists from 37 counties and the capital. In a five-day comic marathon. Given the fact that the event marked 100 years since Constantin Tănase's birth, the organizers staged a session of reports focusing on humor as part of which quite remarkable were the contributions made by university professors, writers, artists, theatricalians from the country's major cultural centres. Throughout three weeks, besides the aforementioned events staged were also Days of Fun and Joke Shows, the Gala of Comedy Shows of Dramatic Theatres, Soirees of Music Hall, a Gala of Screen Comedies, book and manuscript exhibits, meetings of guests with collectives of workers, peasants, students,

A humoristic book and publication exhibition, starting with Dimitrie Cantemir's Istorie ieroglifică - Hieroglyphic History, a work from the beginning of the 18th century, continuing with writings and publications of the 19th century up to the latest publications of today, was the contribution of the Library of Romanian Humor functioning for many years within the specialized county institution. The ninth edition confirmed the Festival's ever growing quality and value. For several days, satirical jest, authentic humor were "at home". Artistic brigades, hu-



held between September 10 and 20, 1980. Of the vast programme presented we mention "The Days of Satirical Humour".

Bienala umorului



"Constantin Tănase"

ristic Literature and Caricature, then "Days of Theatrical Comedy", "The Animated Cartoon Film", "Humour Circus", "Music Hall, Artistic Circus, Satire and Humour Individual and Group Performers Contest", "Humour Discotheque", "Exhibitions of a Cultural Humor Event", and in the end on September 20, the "Laureates Gala". Again, many young people of various professions (graphic artists, engineers, professors, workers, housewives, etc.) were the winners of the first place. The jury awarded prizes which rewarded the efforts made by all participants in the competition.

(CORNELIU BĂRAN)

Top, right: These year stars first met at Vaslui. Top, left: The artists bring down a constant storm with the public's bottom, right: the humorous photograph exhibition solicits either in the utmost degree, bottom left: a well-established genre of humor



Recently three cartoons have been released to be projected on the Romanian large screen, all of them produced by the Animafilm Studios of Bucharest. Unlimitedly sought after by the audience, the Mustelers' Amazing Adventure directed by Victor Anibasescu. The second cartoon, directed by Victor Anibasescu, is The Second Adventure of the Mustelers. The third cartoon, directed by Constantin Păun, is The New Adventures of the Mustelers. And while they continue to attract masses of spectators, enjoying great success, a few real films have also been put out. They belong to the fertile period of Romanian cinema. Among them stands out Nunta Zamferei (Zamfir's Wedding) a lyrical, charming, picturesque approach to the poetry of classical poet Costea (1895-1918) by Tatianna Apahidean. The subject is the work of Mihail Măcelaru, Doina Ciocă, and Doina Vințu. The music is composed by Andrei Brez. Vasile Timb, the photography is authored by Oleg Tătaru. While the verses of Costea's poem are read by actor Mihail Măcelaru, the film is a rich film library, in a varied palette of colors. Apahidean (b. 1939) proposes to meet again with the atmosphere and character of Romanian fairy tales with wedding customs, with anthropomorphic ethnographic elements. Zamfir's Wedding is a major achievement of the author, but also of Romanian animated cinema in general.

# ROMANIAN NEWS



## "WHAT" AND "HOW" IN TECHNOLOGICAL PROGRESS

These are two fundamental questions for any productive activity: WHAT shall we produce? and HOW shall we approach and manage a certain manufacturing process up to its final stages? It is beyond doubt that our entire practical activity is conducted in the light of the questions WHAT? and HOW?

Of course, there are certain differences: regards their share and the nature of the determinations they perform in the area of ma-

terial production: while, as a rule, what one produces is a question of general economic interest with commercial implications, how one produces becomes a question of qualitative organization of the working process. The latter aspect directly concerns research, which requires considerable financial expenses and human effort. However, taking into account the fact that research - obviously conducted in times of peace, as the supreme

goal of our existence - is the spearhead of technical progress, the efforts made throughout the world today for development are necessary and completely justified.

In this respect, the Romanian industry, built from scratch in just a few decades, was faced with particularly difficult tasks. This was due to the fact that the spectacular growth of our economy, particularly during the past two decades in close connection with the demands of the domestic and foreign markets, has been based on the unprecedented development of technological and scientific research.

Naturally, as part of the dynamic promotion of our product offer we have not neglected either the purchase of licences (with its inherent advantages and disadvantages); on the other hand, thanks to our substantial creative potential, we can successfully carry out this process.

That is why today, when we are preparing for the opening of the 14th edition of the Bucharest International Fair, besides our regular offer we can fill orders for the most up-to-date products needed by our domestic and foreign customers. We can assure them that the research units within the Ministry of the Electrical Engineering Industry (MIET) will come up in due course with the right solutions concerning the manufacturing, testing according to customer requests, delivery and putting into operation of the respective products.

NICOLAE VAIDESCU  
Minister of the  
Electrical Engineering Industry





## DEVELOPMENT IN RELATION TO THE PRESENT PROBLEMS OF INTERNATIONAL TRADE

Besides many other domestic factors, it is necessary to take into account the expected sales volume and particularly the possibilities that may materialize in the field of export in order to carry out a rational dimensioning of the material base for industrial production.

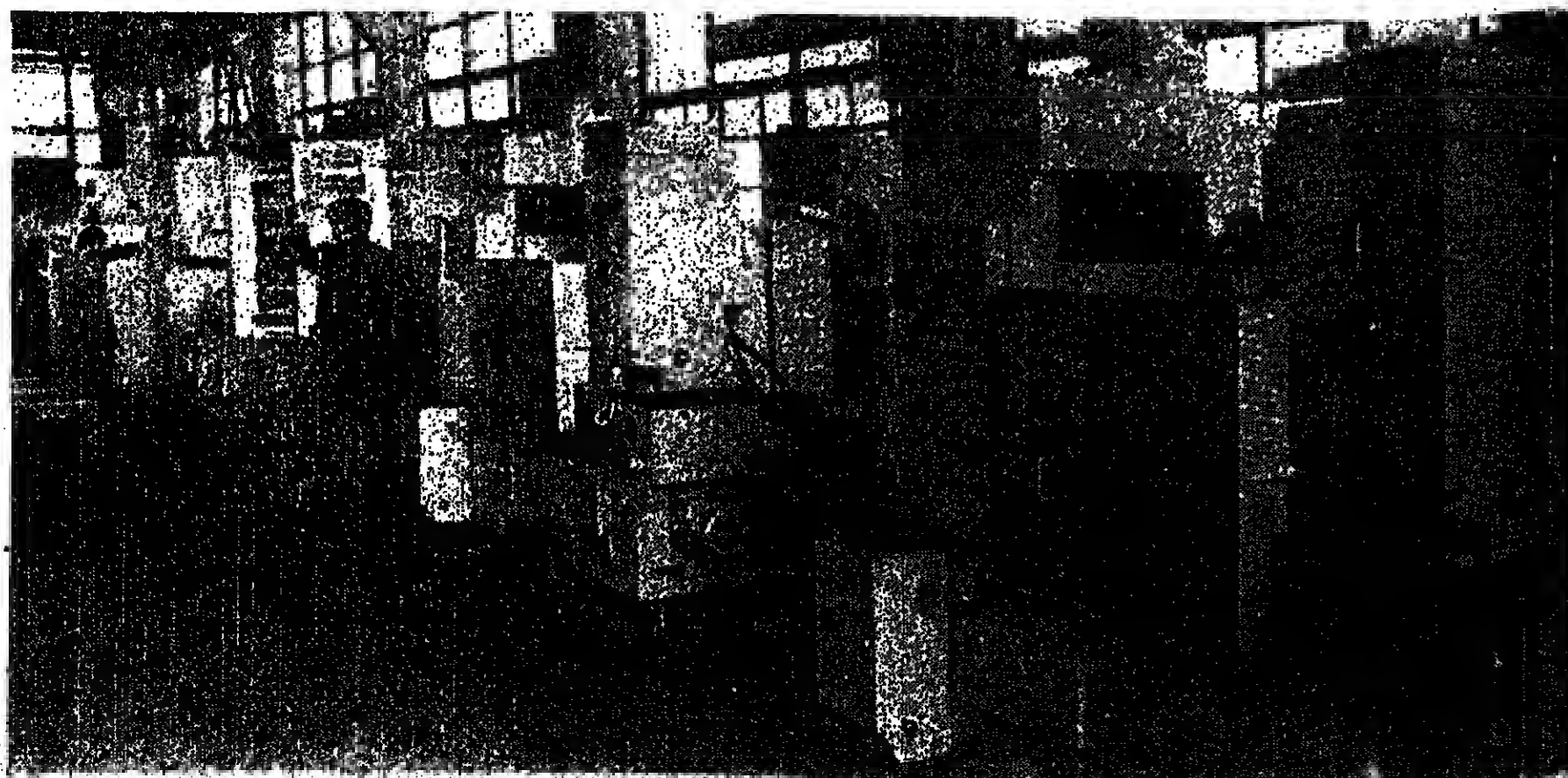
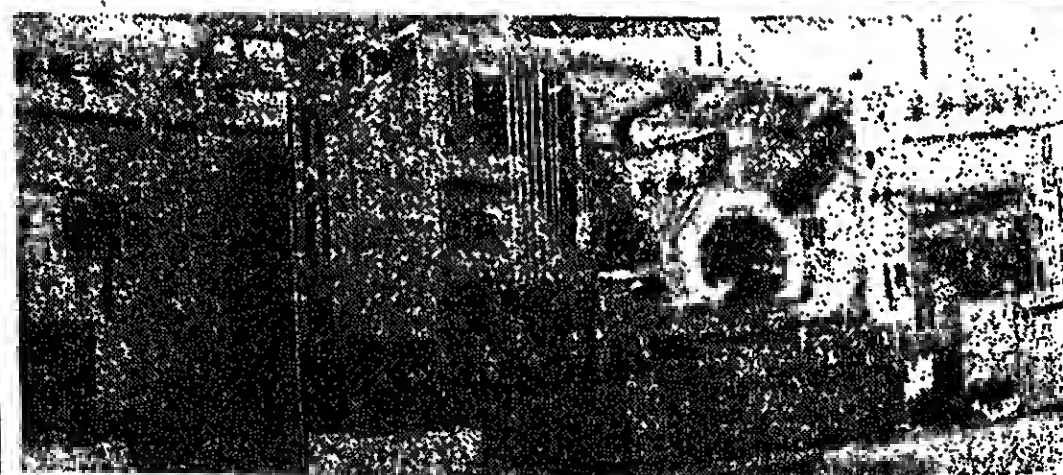
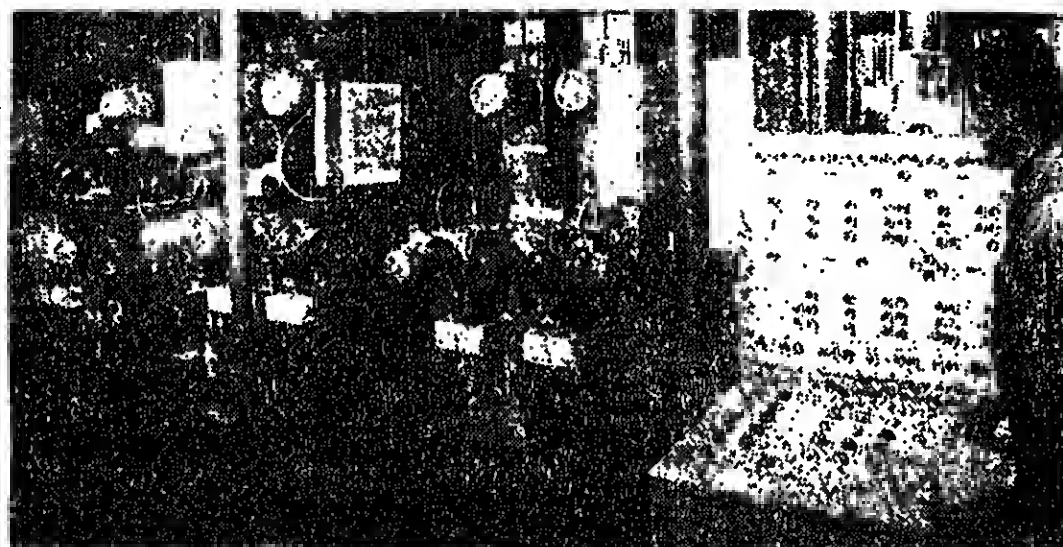
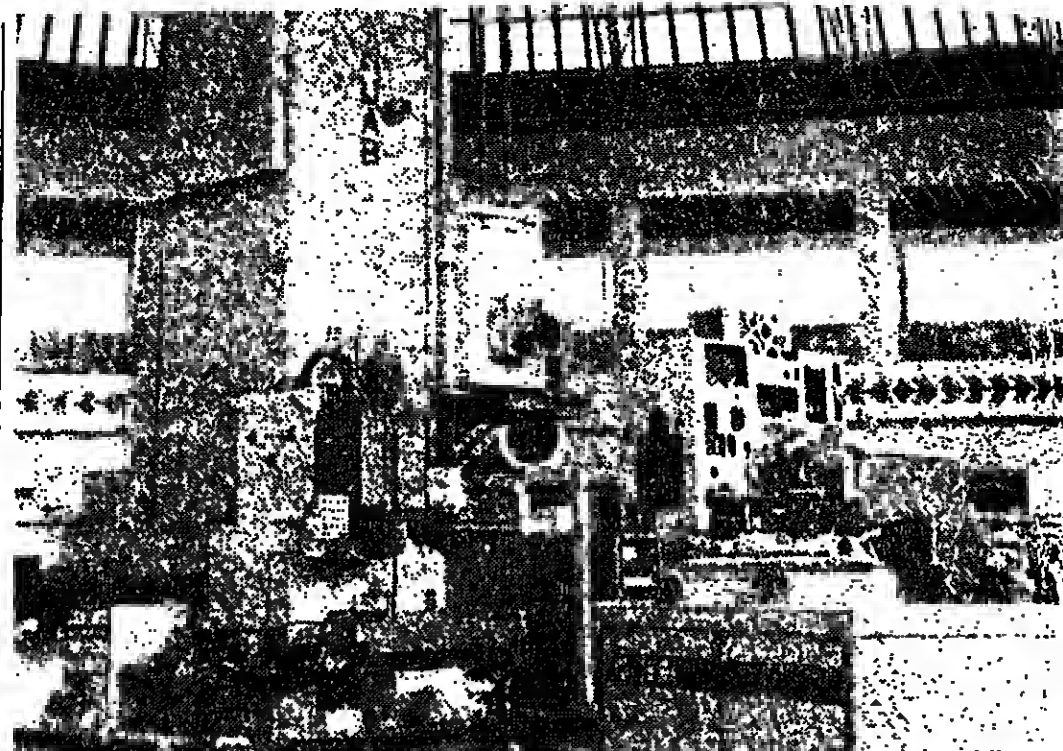
The development of international collaboration with a view to reducing the gap between countries with different stages of development, urgently requires realistic overall conventions regarding the international division of labour. As Romania has so frequently advocated in the most varied circumstances, the final purpose is the setting up of a new international economic order.

This fact, besides considerable advantages regarding the efficient use of raw material resources and labour force, would also pave the way towards fulfilling an important goal of our contemporary world concerning the trade of goods, namely a healthy flow of assets on an international market level without the constraints existing nowadays on the part of large producers.

Otherwise, the most reprovable present phenomenon that can be witnessed — particularly on the occasion of international industrial and commercial fairs — is a relative standstill of promotional activities. This is due to a total lack of planning, central management and specialization: everybody produces large, quasi-total product series and it is not seldom that the panic created leads even large and very large companies to bankruptcy.

That is why, with our eyes set on the factory of the future (actually the factory of these days!) the MIET offer for TIB'88 in the field of machine tools, for instance, has tried to avoid classical displays of machine tools, proposing mainly those achievements that meet the modern requirements for labour process automation. We are thus trying to open up new vistas to our domestic and foreign clients to the balanced development of industrialization in its new stage, in which small and medium-sized countries can and must make an active contribution to international trade.

Eng. ALEXANDRU STANESCU  
Deputy Minister of the Electrical  
Engineering Industry



## TODAY'S NUMBER ONE MERCHANDISE:

## ELECTRONICS

With each moment we are heading for the future, but with each passage we have a different image of it and consider it for ever remote. Actually, the future is already a major component of today, and should we take mankind's major preoccupations of a given moment as the measuring unit, rather than time, electronics and its supporting technologies would offer us real insights into the future.

Indeed, in major international exhibiting events, including TIB, electronics takes us to a land of wonder and complex achievements and significances. This is all the more obvious on stands where large computer systems for the control and surveillance of multi-parameter sectors are displayed, which can be defined only in point of their field of application.

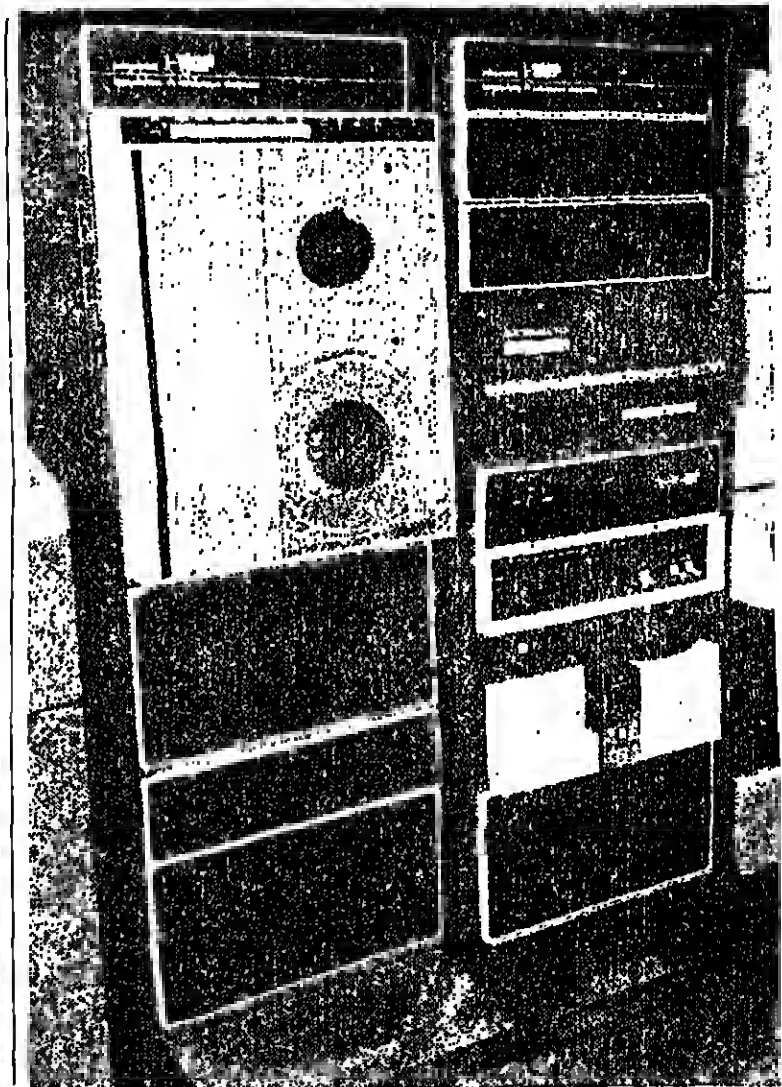
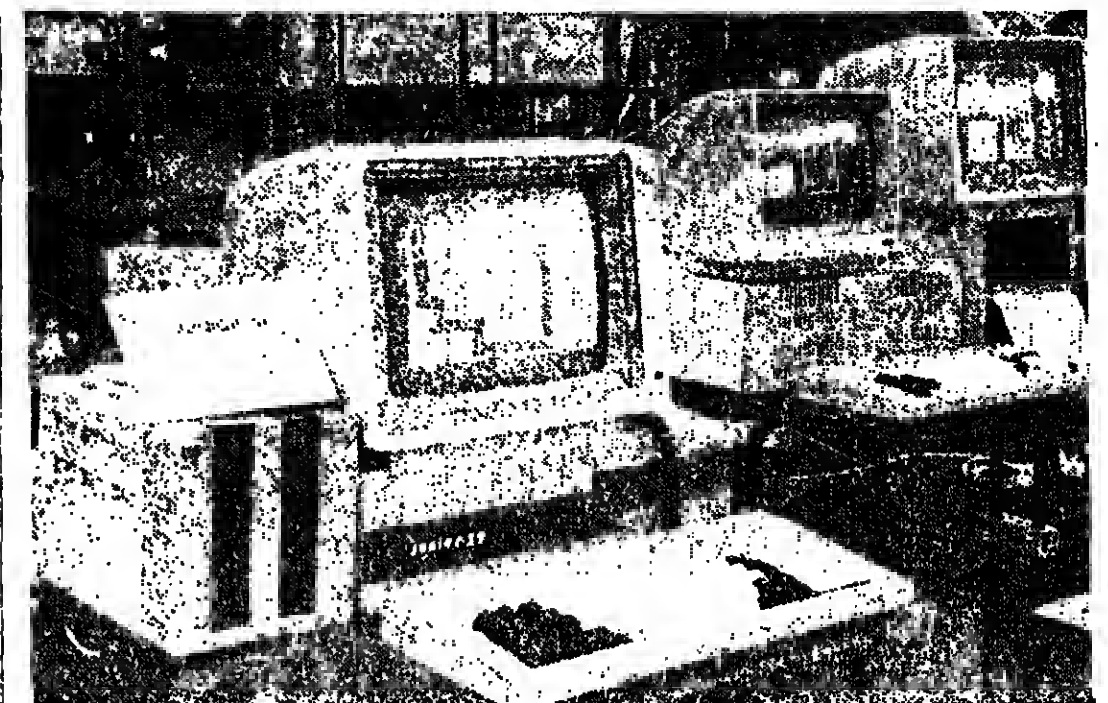
That is why, for further details we suggest that Romanian and foreign visitors of TIB'88 should consult the research institutes within MIET — all of them placed in pavilion A — represented by highly-trained specialists, them-

selves interested in suggestions made by the public as a definite source for the continuous improvement of their labour product.

All this is due to the fact that, although we appreciate experiments carried out in certain countries regarding developments that foreshadow the total cybernetic machine (sometimes the future is forced!) we consider the current needs of the world economy plagued by crises and inequities as far from being totally fulfilled by highly efficient equipment adapted to the present manufacturing technologies.

Thus electronics, already present in the most varied and unexpected realms of social and economic life, will find additional development and achievement resources besides the vigour instilled in it by the international exchange of goods in full swing.

Eng. ANGELA VOICILA  
Deputy Minister of the  
Electrical Engineering  
Industry



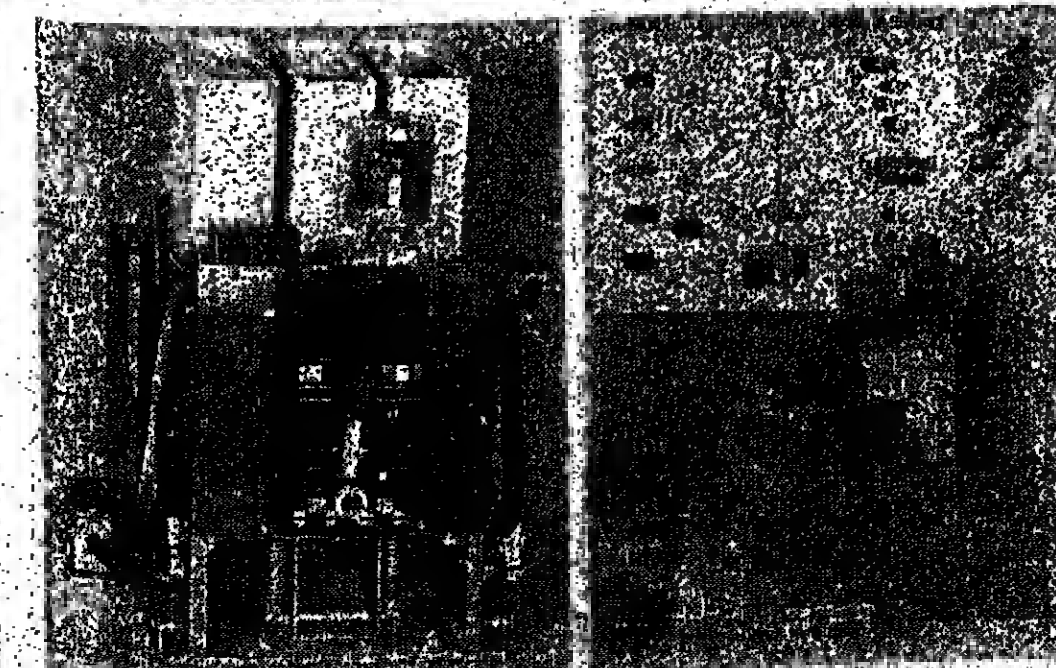
## ELECTRICAL ENGINEERING THE BASIS OF INDUSTRIALIZATION

The gradual elimination of hydrocarbon-based drives places electrical engineering at the foundation of all classical and modern, low and high-power actuating systems, ranging from the customary household equipment to an shore and offshore oil drilling, or cement mills, heavy mills, conveyors etc., each one of them redesigned and adapted to the new operating manner.

In Romania, all these issues have been taken up and solved within MIET, with a major role going to research institutes.

As many achievements of this kind, mostly oversized, cannot be displayed at TIB, but, on the other hand, can be very interesting, particularly in the field of electric traction, we invite all partners interested in negotiations to the stands of MIET research institutes, the most important points of reference being ICPE, ICSITMIAE and IPA.

Dr. Eng. VALERIU STANCIU  
Director of the Technical Department  
within the Ministry of the Electrical  
Engineering Industry



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# NECESSARY QUESTIONS FOR SCIENTIFIC RESEARCH

The main condition of the researcher has been and still is the necessity for a firm grasp of phenomena, and their firm channelling towards definite goals and an accurate prediction of their future impact. Unfortunately, we must notice that we obtain such performances only in restricted fields and that large areas of surrounding reality are still hidden under question marks hard to penetrate.

This does not mean that we have to be pessimistic; on the contrary, we must be proud of the successes man has so far scored in deciphering nature.

However we must continue to ask questions and find answers to them.

For instance, is the path chosen by mankind in the field of energetics the correct one? Thousands of factors demonstrate that it is not, taking into account the fact that today we continue to burn wood just like prehistoric man, that the fossil fuel reserves are nearly exhausted, that electric power does not yield efficiencies according to our needs and that, finally, the nuclear path, although promising becomes operational with great difficulty, as we must keep in view the elimination of all its implied risks.

At the same time, is the modern requirement

according to which we strive to develop ever performing products with an ever smaller consumption of materials an absurd one? Again no, because even in this case resource "exhaustion" puts a severe limitation on our possibilities, and on the other hand successes already obtained in certain fields prove it to be real.

However, besides to somewhat current preoccupations, new questions come up. For instance, what is in store for us as to the climate on Earth? Because there are scientists that announce the unavoidable beginning of a new ice age — every time we go through a long and frosty winter — and there are scientists that blame the greenhouse effect (frequently in the last decade) when we have hot summers.

Of course, the correct answer is still to be found and it would not be surprising that the solutions require infinitely greater efforts on our part than those to which we are accustomed.

Pollution, a fashionable scourge which entails serious risks, can be circumscribed in the same line of thought. Indeed, from the ordinary refuse to radioactive waste deposits or carbon dioxide emanations in the atmosphere, everything represents a real threat to humanity and the environment.

How does scientific research tackle this problem?

The programmes in this field are and can be extremely complex, and the paths to be followed, although in great number even now, imply extremely expensive technological efforts. And yet, as the issue is a vital one, something must be done.

For this issue, we, the ICPE researchers, who together with the entire scientific community exist and act through and for such questions, have certain results; and even though they do not yet solve the problem set forth, they certify however the legitimacy of our steps, and equally maintain the necessary optimism for progress.

For example, besides our achievements for the purification of waste waters with ozone generators in adequate installations for the elimination of phenol sulphide and cyanide industrial impurities, we shall present in the following pages some of the ICPE products in the field of equipment for the automatic measuring of atmospheric pollution level with various natural and/or industrial agents ranging from dust to chemical noxes.

Dr. eng. FLORIN-TEODOR TANĂSESCU,  
Director of ICPE

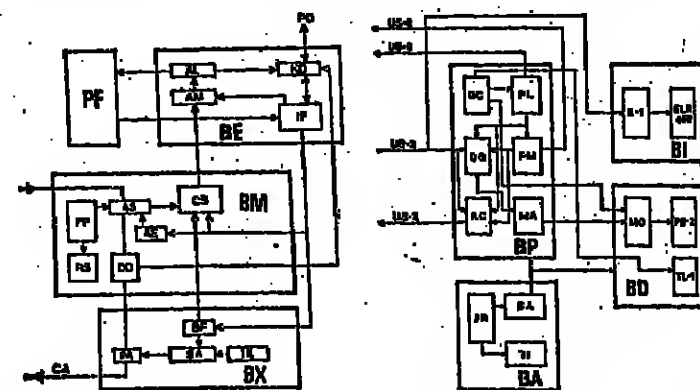
## PAN-2X, NO<sub>2</sub> AND NO<sub>x</sub> AUTOMATIC INSTALLATION FOR ATMOSPHERIC POLLUTION MONITORING

### APPLICATION

- air pollution monitoring in urban environments
- air pollution monitoring in industrial environments
- air pollution monitoring in industrial halls and technological process control
- laboratory equipment (chemistry, medicine) for solution analysis (special optional versions)

### TECHNICAL FEATURES

- environmental temperature: -20 — +40°C
- input voltage: 220V, -15 — +10%
- NO<sub>2</sub>, NO<sub>x</sub> deleterious substance concentration range (in three automatic or manual sub-ranges): 20 — 2000 µg/m<sup>3</sup>
- measuring error: 5%
- mediation period: 30 min — 24 h
- digital signal: TTL
- data processing program:
  - permanent: every 30 min
  - programmed (optional): four/day
- time of automatic self-supplied operation: 15 days
- periodicity of necessary checking: 30 days



### BLOCK DIAGRAM

- AE — magnet valve
- AL — logarithmic amplifier
- AM — measuring amplifier
- AS — air and solution circuits
- BE — electronic unit
- BF — power unit
- BM — measuring unit
- BX — auxiliary unit
- CA — air circuit
- CS — sensor coil
- DO — digital flowmeter
- IF — interface
- PA — air pump
- PD — data processing system
- PP — peristaltic pump
- RS — front panel
- SA — solution tank
- TR — supply transformer

### MAIN CIRCUIT DIAGRAM

- BA — supply unit
- BD — indicating unit
- BI — recording unit
- BA — processing unit
- DO — sub-range and flow correlation
- OC — colorimetric clock and generator
- MA — register
- MO — register
- AL — operation program measuring
- PM — program
- RC — correlation unit
- SA — supply source thermostat control of the inside
- T — temperature
- YR — transformer

# WHAT ARE YOU NOT EXHIBITING AT TIB '88?

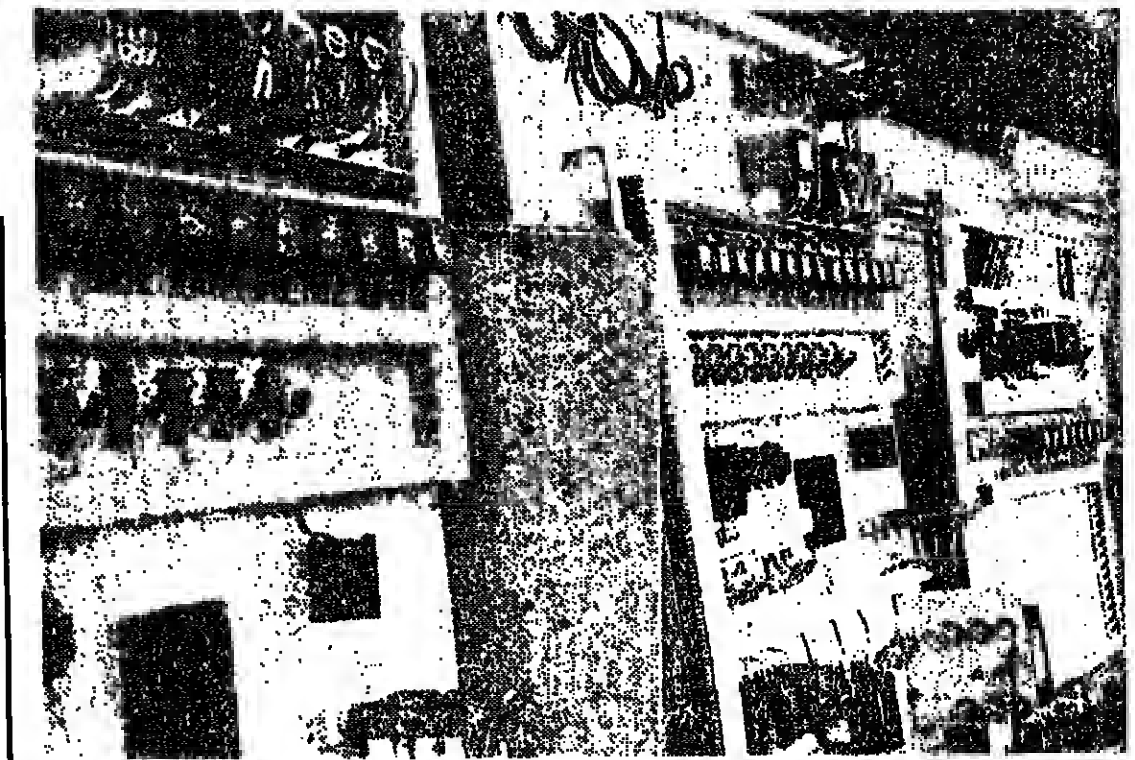
— ICPE notes by Elena SOIMU —

Although it is customary to ask what you exhibit, in the case of ICPE-Bucureşti, due to the scope of the field covered, the question must be asked the other way round. The answers below prove that no matter how rich the stands of an exhibition may be, they represent, at best, just an invitation to know and thoroughly study a certain field.

## ELECTRICAL TECHNOLOGIES

Through the reconsideration of certain electrical phenomena still not long ago considered the object of laboratory experiments, specialists have found unexpected means of industrial applications, resulting in: productivity, cut-down material consumption, energy and labour, exceptional quality and reliability, pollution prevention, etc.; these are the electrical technologies, a top area of specialized research in which ICPE holds a front place; up to the present moment it has developed various equipment and equipment systems for: electrocorrosion metal processing, electrochemical treatment, electroplating, non-conventional welding, magnetoformation, electrothermia through induction, microwaves, or high-frequency generators, galvanization / painting through electrostatic field spraying non-destructive magnetic control/electrochemical corrosion/neutralization of electrostatic parasitic loads/document copying with electrostatic machines/electrical engineering cryogenics/electric, electromagnetic and gravitational field effect applications/necrorele elementary particle beam processing, etc.

Dr. Phys. ANA-MARIA MOISIN  
ICPE Scientific Secretary



## TECHNOLOGICAL ENGINEERING DEVELOPMENTS

Preoccupied with the continuous updating of the industrial output and a faster assimilation of technical progress, ICPE researchers offer together with the prototype of new products the entire system of tools and electric devices necessary for serial manufacturing.

Their development, including that of the ending dice as well as of the individual specific processing programmes, represents an engineering effort that is equal in importance to the novelty of the prototype itself.

But, with certain small exceptions, such achievements are not exhibited on stands, a place meant for finished products.

In this respect I consider that Romanian and foreign participants in TIB '88 should know that ICPE can offer complete documentation for its sophisticated devices, machines and installations such as: high-power adjustable electric drive equipment with slow or fast synchronous motors for heavy industrial units or electric traction, installations for the recovery of rubber and metal cord from used tires through cryogenic methods/devices and installations for electrostatic field painting/automatic systems for industrial energy dispatch systems, manufacturing of disk rotors for d.c. servomotors, and many others.

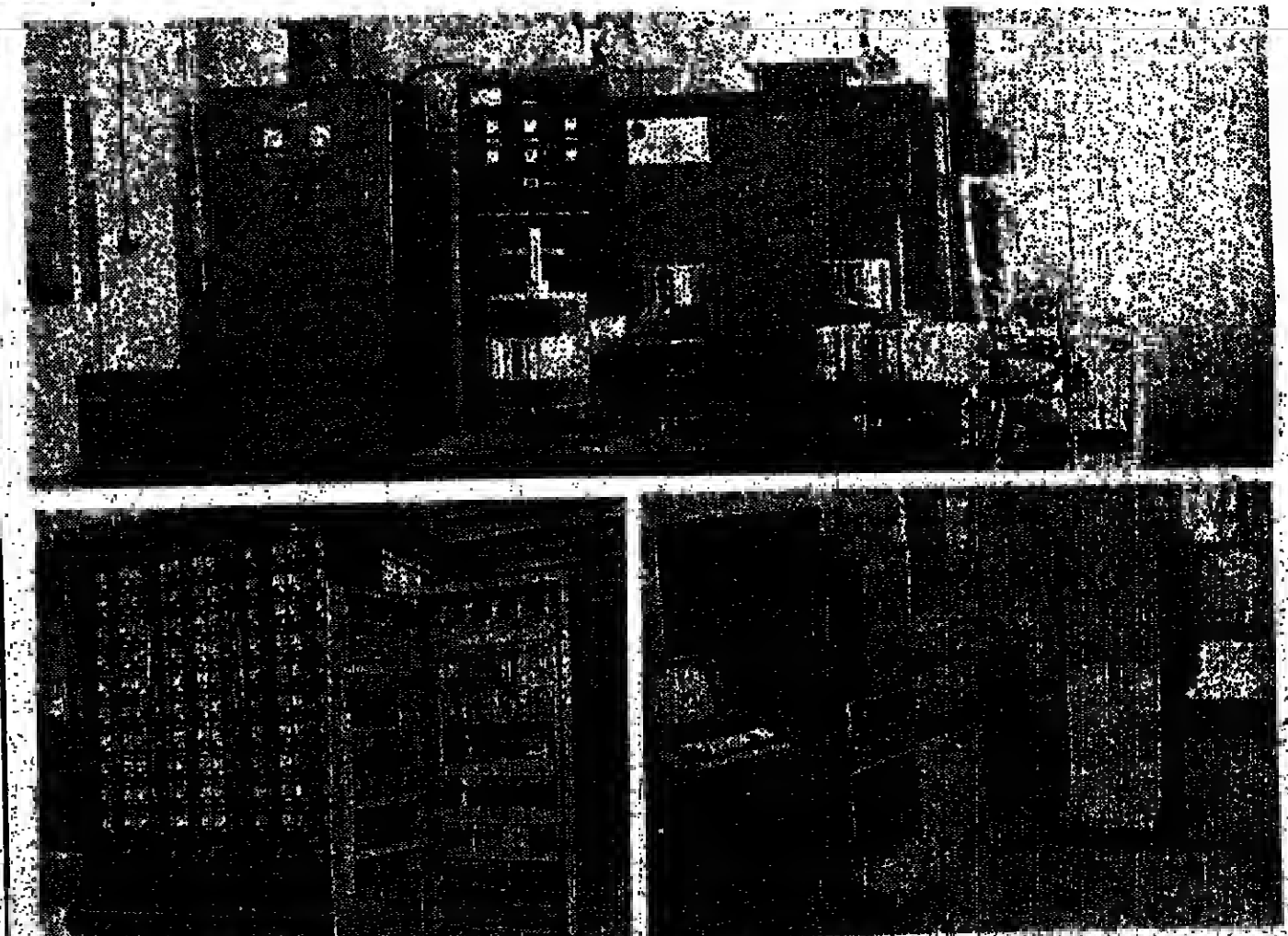
Dr. Eng. CRISTIAN-TITIAN BĂRÇA  
Deputy Scientific Director of ICPE

## COMPUTER TECHNOLOGY PROGRAMMES

A relatively abstract merchandise as compared to the current exhibiting possibilities is industrial software. However, taking into account the present and future development of computer technology as well as the massive surge of information in modern industrial processes, the programmes and programme packages for computer-aided research and design have or should become the major object of commercial transactions.

Present in this field too, ICPE offers specific programmes for: computerized modelling-simulation (the boundary element method, the finite element or integral equation method) industrial informatics (process management equipment: microprocessor system, software) documentary informatics (the ARIEL-ICPE system product data base) information systems (operational management control, basic activity monitoring/medical informatics (psychophysiological tests, diagnosis, processing) artificial intelligence (expert robots) expert systems.

Mathematician  
ONICA PARASCHIVA  
Director of the Computing Center of ICPE





If, as has already been demonstrated, our detachment from the animal world was accomplished through labour, the long historical process of nature being transformed by man would not have been possible without research. It follows from this that for a long time, without clear-cut programmes and to a certain degree unconscious, man was born and continued to be a researcher.

Turned into a profession in our times research is conditioning industrial output as well as, in the broadest sense, the entire social and economic life. Thus is for instance, the exceptional case of Romania where science and technique have for long been integrated with the productive forces, with direct influence upon industrial progress. The development of scientific research is significant both in point of level and as a balance of achievements registered in an extremely short period of time.

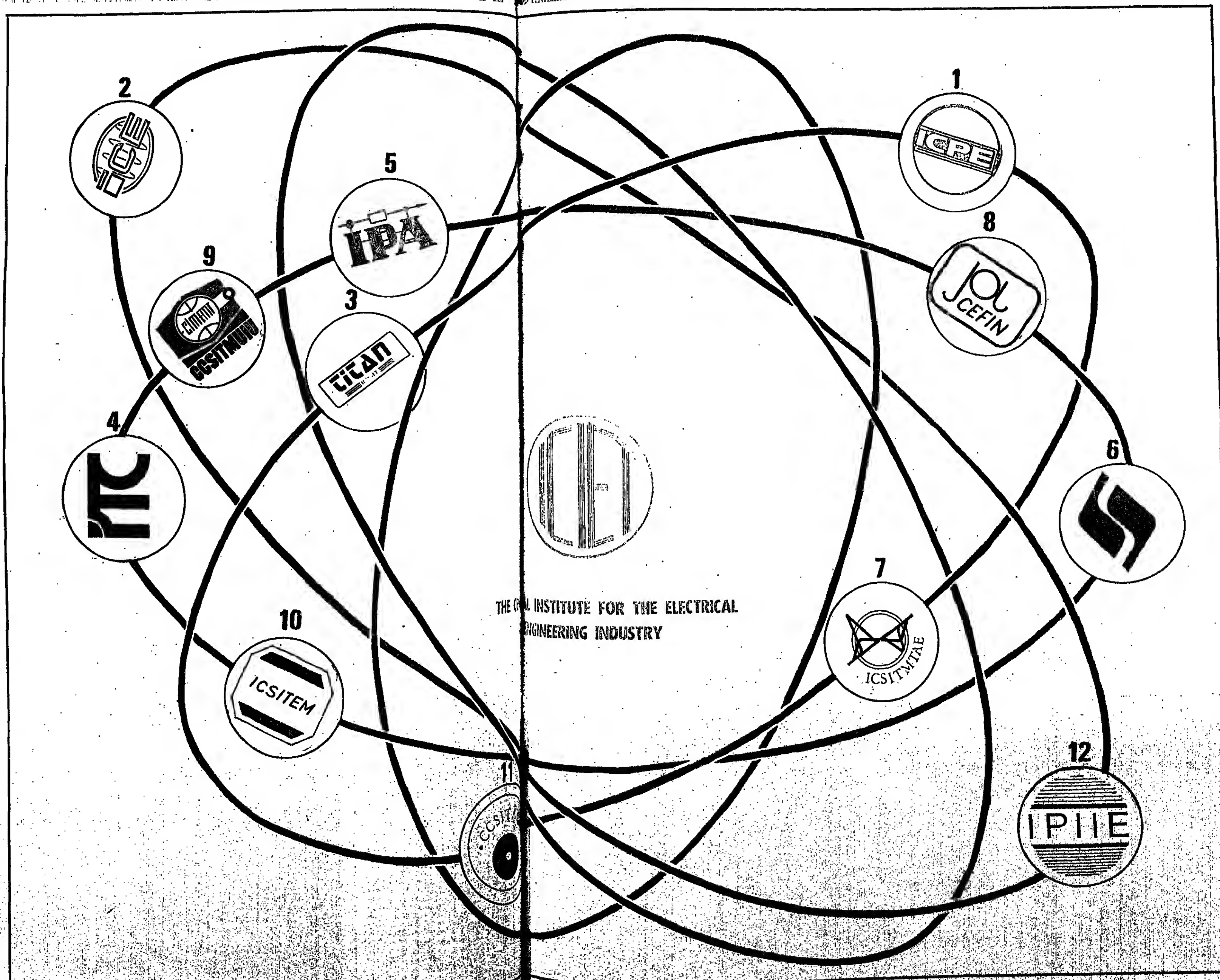
Indeed, although the beneficiary of a tradition of real and long-lasting value — the technical genius of the Romanian people has made a real contribution to the progress of human knowledge the Romanian scientific research has gained existence status, concrete orientations and work programmes particularly after 1965 as a result of the Decisions of the Ninth Congress of the Romanian Communist Party.

From this date on, the conscious placement of the scientific spirit in the most varied domains of activity, the opening of new scientific horizons, the consolidation of the research material basis as well as the training of specialists have helped Romania become one of the countries with a high scientific level of material output.

Obviously, it is hard to list in these few lines all the directions of activity of present Romanian scientific research and even more difficult to limit them; that is why, instead of any systematization immediately contradicted by the continuous diversification of the research field, we can state that we are in a real universe in full expansion.

It appears to be simpler to circumscribe — of course, in a relative manner — the research system within the Ministry of Electrical Engineering Industry for which we are responsible, with the notice that within any boundaries established, the rich ideas and perceptible realities due to specialized

(cont. on p. VIII)





(cont. from p. VI)

research are infinitely more encompassing.

Within MIET we have, for seven industrial centers, twelve scientific research and technological engineering institutes and centers with preoccupations ranging from with detailed study of specific materials to prototype development and experimentation, product quality and reliability assurance, establishment of the conditions for series manufacturing, surveillance and support of the industrial development process, creation of related technologies and their dynamic adaptation to the needs and possibilities of the manufacturing process.

The generic fields of this system are:

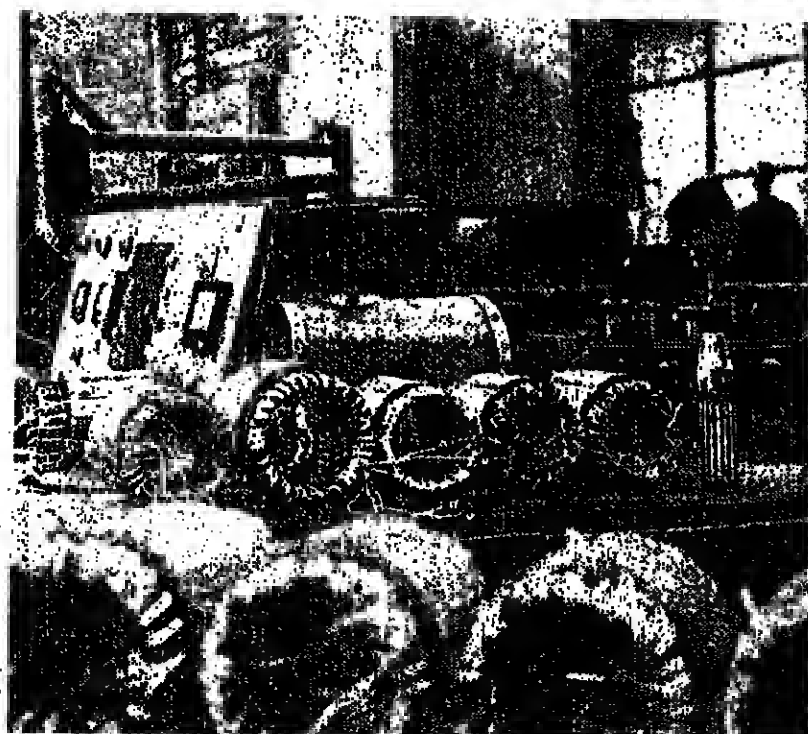
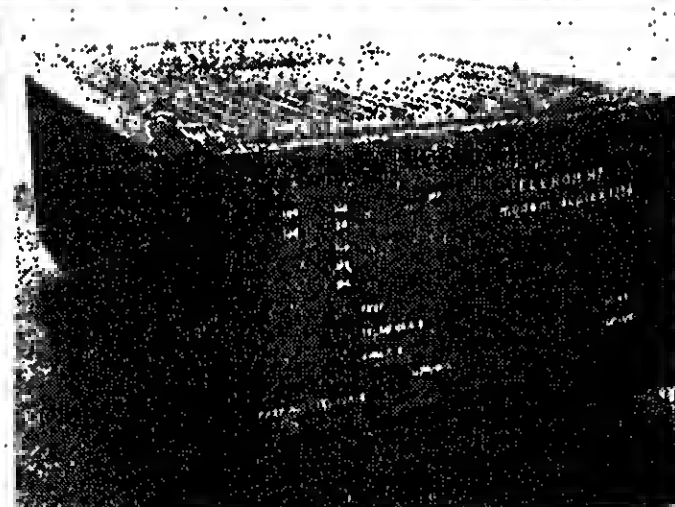
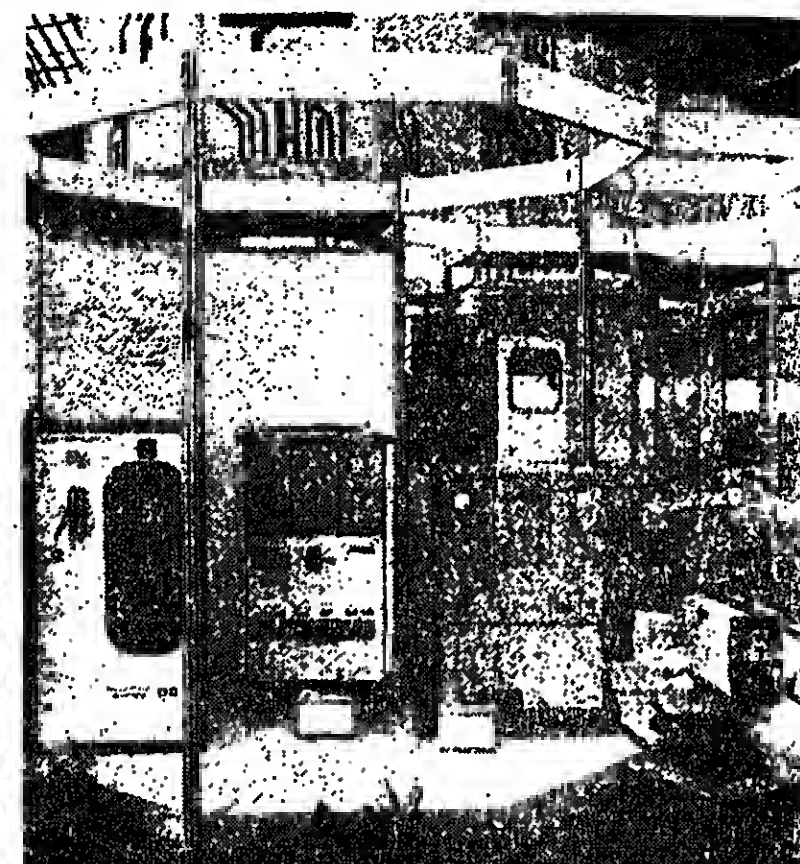
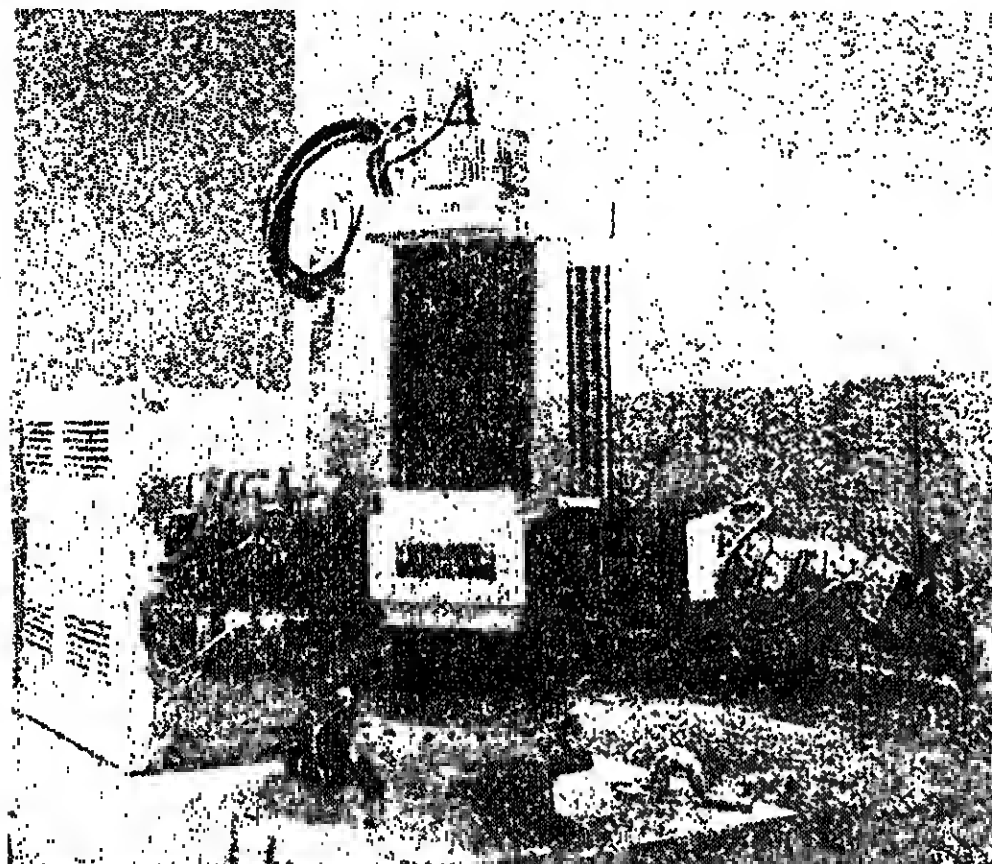
- general electrical engineering
- machines, transformers and electrical equipment
- industrial electronics
- electronic materials and components
- computer and informatics technique

- general and custom machine-tools, flexible cells and manufacturing systems, industrial robots
- industrial automation and telecommunications
- fine mechanics and tools
- machines for the light industry
- mechanical equipment
- household machines and accessories
- enterprise designing for the electrical engineering industry.

Hoping that even a brief presentation of the preoccupations

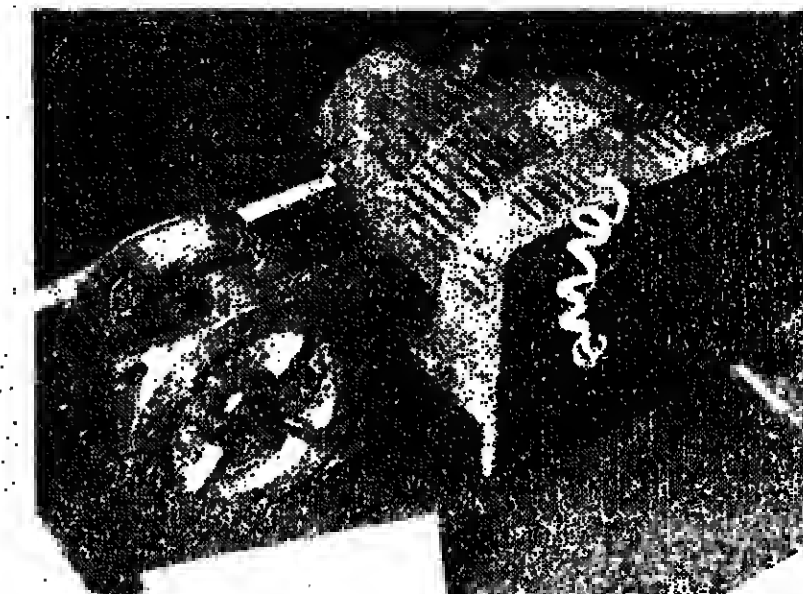
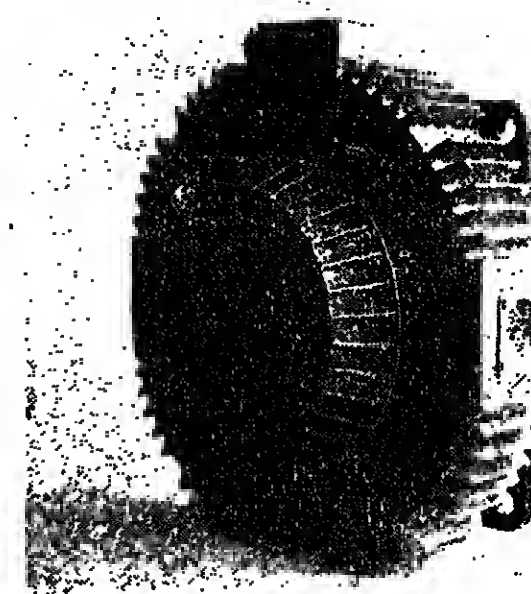
of the MIET research unit can lead to a progressive expansion of the connection area of Romanian Scientific research with specialized research throughout the world - a vital condition for general development - we are offering in this field in the following pages.

Dr. Eng. AUREL SANDU  
General Director of the Central Institute for Electrical Engineering (ICIET) and Director of the Scientific Research and Technological Engineering Institute for Machine Tool Assembly (ICSITMUA)



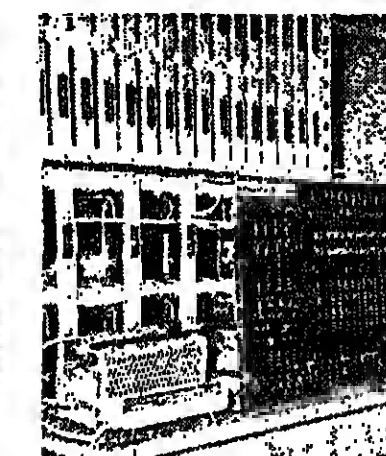
## 1. ICPE

- General and custom relative electric machines: d.c. servomotors, micro-motors, three-phase asynchronous motors with integrated loads
- Equipment for electric power distribution, automatic dispatch and power factor improvement
- Electric outfits and power rectifiers for drives in the construction material industry
- Custom equipment for railway or ship electric traction and for passenger transportation
- Electrical engineering materials
- Transducers and sensors
- High-voltage and low-voltage equipment
- Measuring and control equipment
- Equipment for solar and wind energy conversion
- Equipment and installations for the automatic measuring of pollution and the purification of waste waters
- Electroinsulating materials and insulating systems



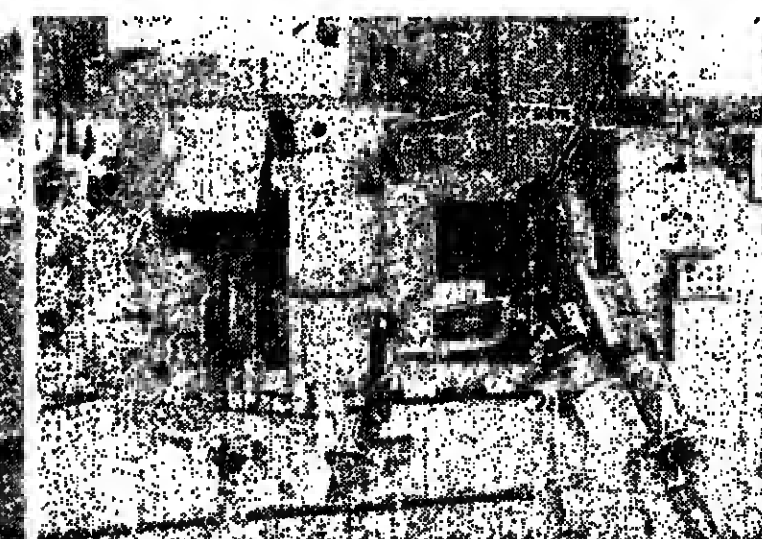
## 2. ICE

- Measuring and control equipment for electric and electrostatic variables
- Professional radio communication equipment for naval or use for ships (shortwave, ultrashort and microwave) for land, water borne or via-satellite traffic
- Electronic equipment for medicine and biology
- Industrial electronics equipment
- Electronic components for professional or similar use
- Widely used audio electronic equipment



## 3. ICSITMUA

- General-purpose and custom machine tool research and design
- Transfer lines
- Processing centres and flexible automatic cells
- Machine systems
- Industrial robots
- Machine tools for plastic deformation processing
- Plastic processing machines
- Tools
- Research, testing and appraisal of machine tools, machine components and specific hydraulic, pneumatic and electric drive equipment
- Machine tool construction, ergonomics and reliability studies
- Programs for the computer-aided design of machine tools
- Related technology development
- NC machine tool programming



## 4. ITCI

- Medium and medium-large capacity computer systems
- Mini- and microcomputers
- Data acquisition and primary processing equipment
- Microprocessor systems and devices
- Ready-to-operate mini microcomputer application systems
- Computer-aided design equipment
- Image-processing data bases
- Software for data banks and remote processing
- Industrial application software
- Consulting for specific Romanian and foreign, products: IBM, Xerox, Apple, ITT, Varian, etc.





## 5. IPA

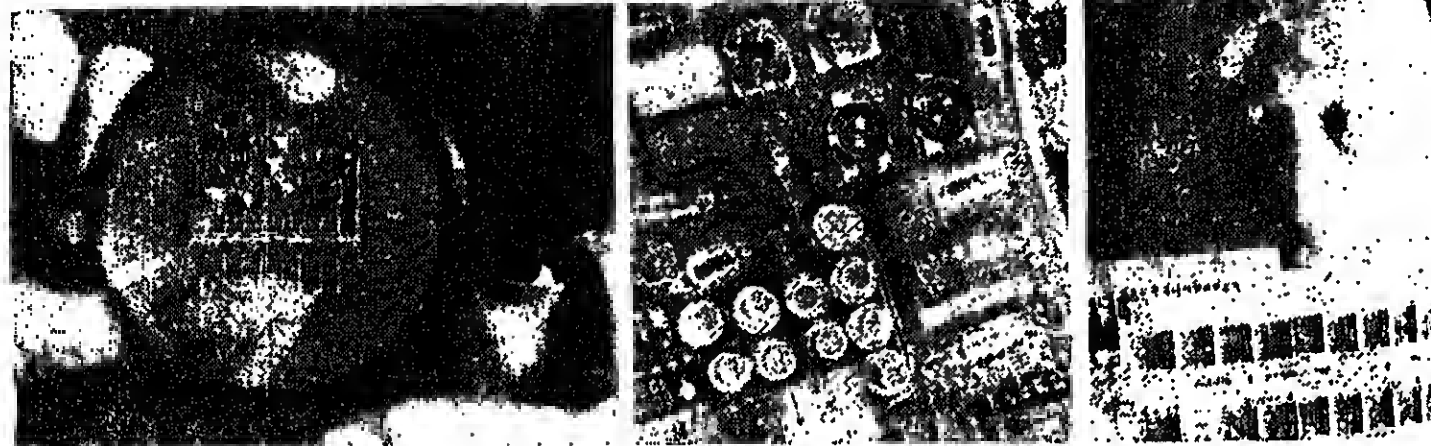
- Research and development of automation products for industrial processes, agriculture, mining, ecological systems, railway and marine traffic, fire alarm, etc.
- Equipment for NC machine tools
- Automatic equipment for remote data transmission and processing
- Automatic dispatchers for oil and gas fields
- Equipment for high-power adjustable drives
- Transducers, controllers, converters and carry-out elements
- Control and surveillance panel for atomic power units
- Specialized interfaces for program connection of computer equipment
- Automation equipment and devices for optical fibre transmission
- Automatic electric and electronic equipment for wire telecommunication



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING  
INSTITUTE FOR AUTOMATION AND TELECOMMUNICATIONS

## 6. CCSIT-S

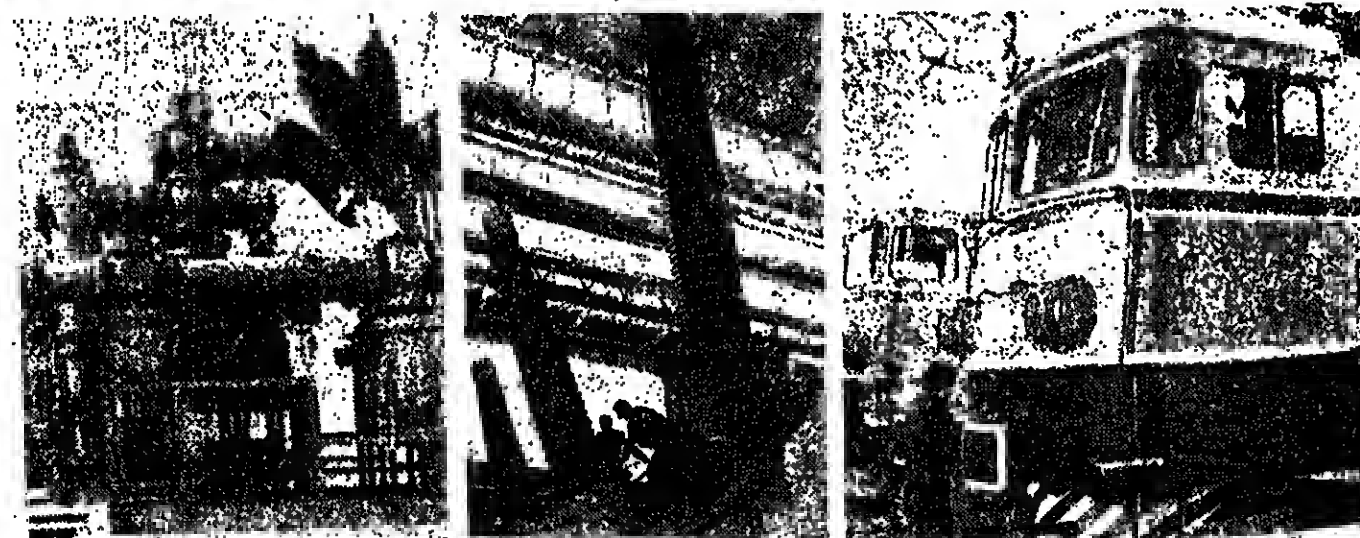
- Micro semiconductor devices
- Diodes and transistors
- Field effect transistors
- Radiation-sensitive semiconductor
- Optical couplers and power transistors
- Hybrid and monolithic integrated circuits (MOS or CMOS)
- Special materials for semiconductor technologies with network interconnect and high-resolution
- Semiconductor control and testing equipment



SCIENTIFIC RESEARCH AND TECHNOLOGICAL  
ENGINEERING CENTRE FOR SEMICONDUCTORS

## 7. ICSITMTAE

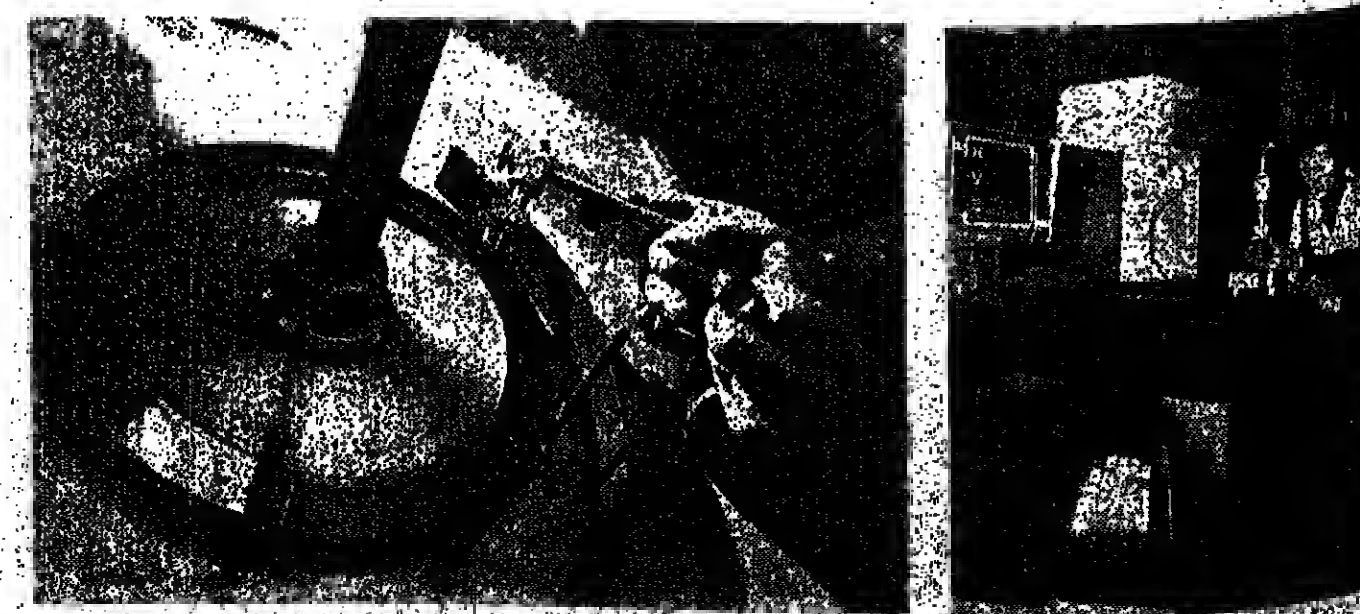
- Diesel-electric locomotives
- Mainline electric locomotives
- Long-distance and subway electric trams
- Medium and high-voltage electric equipment
- Power transformers
- Traction generators and motors
- Mill motors
- Low- and high-voltage synchronous and asynchronous electric motors
- Low- and high-voltage starting and control electric equipment
- Electric equipment for ashare and offshore great-depth drilling
- Urban electric traction stations and substations for the subway or mining works
- High-voltage insulating systems with thermal and dynamic stability under short-circuit currents
- Protection diagrams for power transformers under sudden short-circuit transient operation
- Nonconventional equipment



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING INSTITUTE  
FOR MACHINES, TRANSFORMERS AND ELECTRIC EQUIPMENT

## 8. ICSITMFS

- Mechanical variable measuring equipment
- Round and snap gauges
- Pitch deviation measuring equipment
- Gear measuring equipment
- Curved-edge measuring and drawing equipment
- Optical rulers and readers for machine tools
- Coordinate measuring systems
- Laser dynamic measuring equipment
- Checking devices and tools
- Automation elements
- Timing and passive control equipment
- Industrial clock mechanisms
- Pressure related equipment
- Temperature and pressure controllers
- Valves and rheostats
- Pressure gauges
- Tools and tool holders
- Stamped metal articles
- Diamond-filled tools with metal or resin binders
- Diamond and diamond-paste cutting tools



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING  
INSTITUTE FOR PRECISION MECHANICS AND TOOLS

## 9. CCSITMIU

- Machines for the preparative sector in the textile industry
- Automatic, horizontal or vertical weaving machines with a high degree of automation
- Machines for textile finishing, history and linen
- Spinning fibre processing machines
- Clothing machines
- Machines for processing plastics, leather, glass, ceramics, rubber, wood and non-ferrous metals
- Sewing machines
- Industrial or similar usage ironing presses
- Ornamental operation machines
- Consumer goods
- Designs for specific plant development and complete factories



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING  
CENTRE FOR LIGHT INDUSTRY MACHINE TOOLS

## 10. ICSITEM

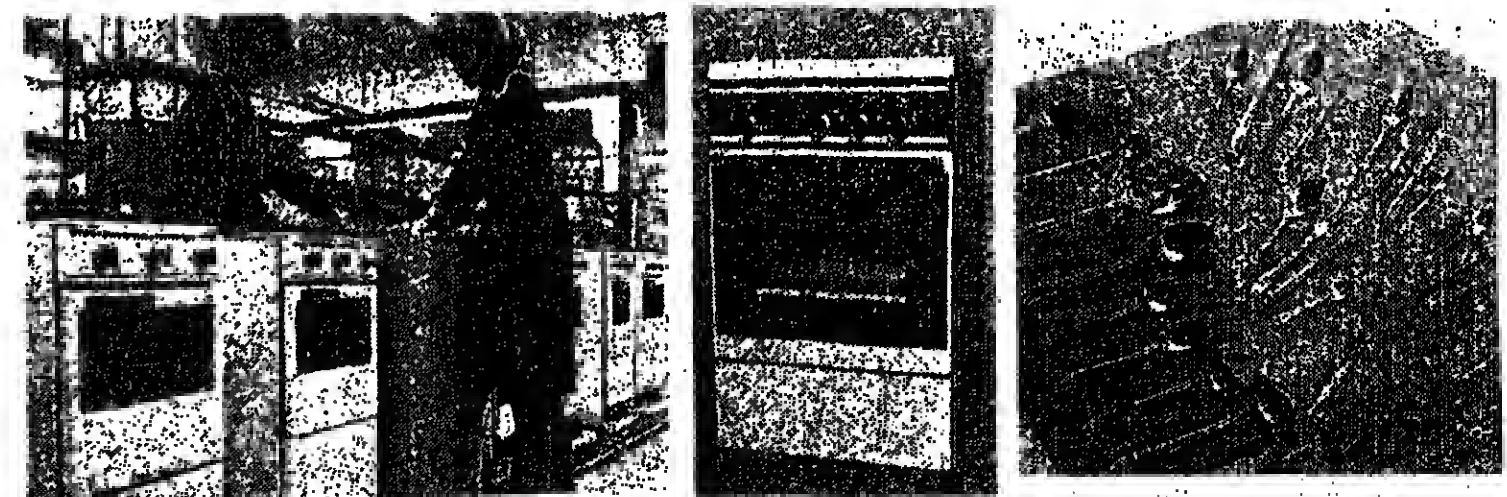
- Reverses and mainframes
- Chucks for stable or portable drills
- Central-tilt mandrels
- Universal chucks for lathes and rotating tables
- Rotating and tilting vices
- Front and inside rectification machines
- Couplings and brakes
- Chases and pins for the textile industry
- Pumps and hydraulic motors
- Telescopic cylinders
- Hydraulic servomechanisms
- Carburetors
- Air compressors
- Metal recipients
- Thermal controllers
- Gearboxes
- Industrial or similar usage optical equipment
- Photo and motion picture equipment
- Medical equipment
- Consumer goods



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING  
INSTITUTE FOR MECHANICAL EQUIPMENT

## 11. CCSITAC

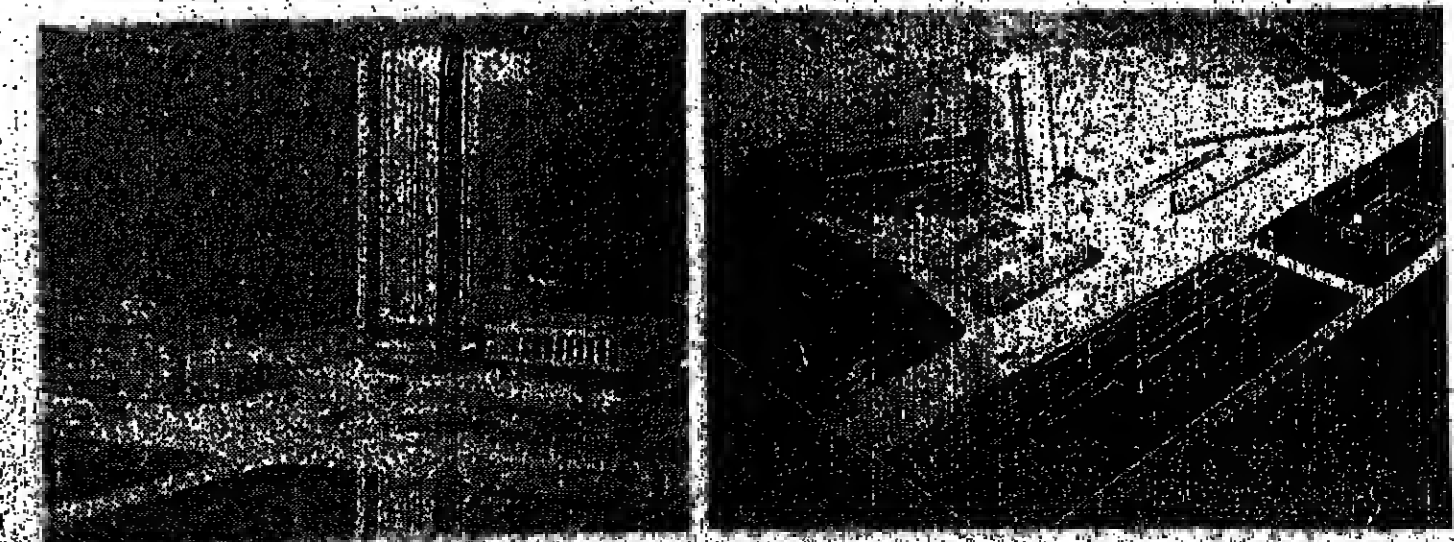
- Gas cooking machines
- Electric cooking machines
- Compounds for gas and/or electric power meal preparation
- Kitchen robots
- Metal accessories
- Ferrous or non-ferrous kitchenware
- Long-size or telescopic umbrellas
- Protective and sun glasses
- Mechanical electric and electronic games
- Dolls and dummies
- Metal construction for household use
- Tools and appliances for individual household use



SCIENTIFIC RESEARCH AND TECHNOLOGICAL ENGINEERING  
CENTRE FOR HOUSEHOLD APPLIANCES

## 12. IPIIE

- Studies for new investments
- Structural designs regarding:
- Types of products to be manufactured
- manufacturing programme for each product type and size
- manufacturing integration degree
- development possibilities
- Feasibility studies regarding profitability and economic efficiency under specific local conditions
- Preliminary projects
- Execution designs (plans and drawings for custom and general technologies, architecture and construction, installations and utilities, economic elements etc.)
- Designs for equipment specific to the machine tool electrical engineering, hydraulic and mechanical engineering



INDUSTRY INVESTMENTS  
DESIGN INSTITUTE FOR ELECTRICAL ENGINEERING



## RESEARCH BEYOND THE PRODUCT

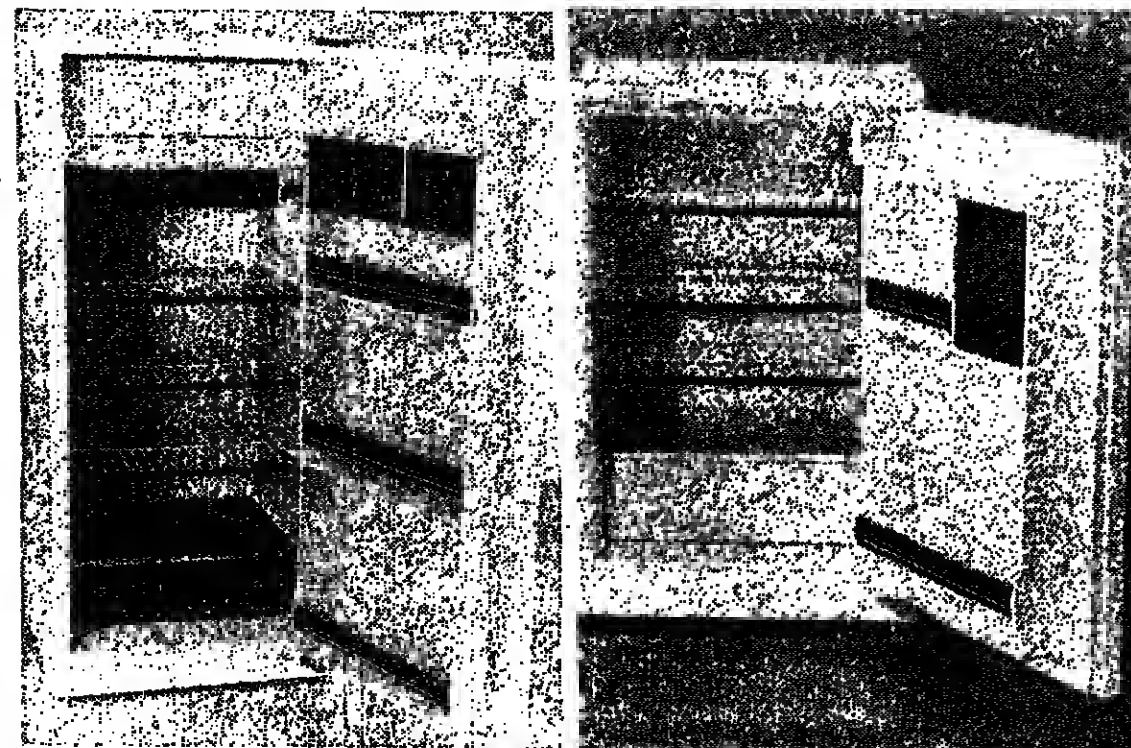
The products and technologies described in the presentation of the MIEI institutes and centres are already in current manufacturing and can be found in their own stands as well as in those of the industrial centres or enterprises for which they work. But wherever the products may be exhibited, their development, putting into production and continuous updating to the fruits of these creative centres that make the improvement of technical and functional parameters, the cutdowns on specific material and energy consumption, the reduction of prices and of the employed labour force their continuous preoccupations. Synthetically speaking, our research units are ready for research exchanges, cooperation, collaboration ventures and services in the following fields:

- Topic research, individual, bilateral or for third markets
- Machine, equipment and specific installation design
- Complete technological studies or for development - up-dating
- Carry-out technical documentation
- Feasibility and marketing studies
- Complex technical assistance for operation list issuing, tool selection, transportation and storage, essentially on operation, testing, operational maintenance.
- Service, repair and overhaul
- Refresher courses and training
- Product documentation (task notebooks, technical books and standards)
- Prototypes and unique
- Testing stands
- Testing equipment
- Quality certification tests regarding operating capabilities, endurance and reliability
- Operating tests of specific products in a temperate, tropical or polar climate, at high altitude, underground or under water
- Technical offers, consulting, computer technology programmes.

Of course taking for granted the above services, particularly those concerning quality and reliability, in Romania as well as throughout the world, ever larger investments are being made in order to diversify the product range and increase the number of marketable items. However, we can hardly fail to mention the fact that a truly active research cannot limit itself to the product level and that an investment becomes efficient - in the modern sense of the word - if and only if the research work goes beyond the product, enclosing all related services in its updating area.

It is only in this manner that a correct placement of an achievement in a coherent and productive value chain can be ensured. This has always been for the MIEI research network a rule of conduct, as well as an obligation always fulfilled in an outstanding manner and therefore a well-deserved title of honour and good credentials.

Prof. GHEORGHE SAVA,  
Head of the ICPE Technical-Scientific  
Information Department



Supplement brought out under the supervision of the Technical-Scientific Information Department of ICPE

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English version: Laurențiu CIOBANICA, Călin IUESCU

## RESEARCH BEYOND THE LABORATORY

Men's critical spirit as an essence of his affective and moral personality, exerting itself incessantly through questions dealing with the elucidation and promotion of novelty, does away with the older assertion that research - no matter what kind - begins and ends at the gates of specialized institutions.

On the contrary, taking into account the high level of modern material production, the intervention of the direct worker in the improvement of the product's final configuration is both possible and necessary. This comes down to asserting that research activity continues beyond the laboratory involved with this function, as many of the performance features of the goods we use spring from factory-level research.

The Gheșil Refrigerator Enterprise (IGF) provides a good

example in this respect. Its ARCIUC trademark has won it a solid national and international reputation, its presence on the international market with its first household refrigerating equipment standing out due to its diversified character and undeniable quality.

As this is already a fact, it must be stressed that IGF has reached this standard developing on intense research activity on an enterprise level position, other words it has taken up and solved specific themes in the very intimacy of the manufacturing process.

On this basis, going beyond the narrow limits of the laboratory on the basis of which it built the manufacturing of compression refrigerators with a capacity of 140, 180 and 240 l (Thomson-Houston, France) IGF has assimilated through its own efforts two new categories of products: compression refrigerators and refrigerating equipment, designed in an enterprise level of technical and economic excellence.

Obviously, during this process we have often resorted to specialized research, in particular through ICPE-Bucharest, in order to solve technical problems (reliability etc.) but, in what we are now presenting, the research is carried out in the factory, in the workshop, in the laboratory, in the field, in the customer's home, in the West, in Germany, in Switzerland and in the United States.

Under the crystal-clear leadership of engineers and technicians, determined to achieve the highest quality in this field, in the last few years, the Gheșil Refrigerator Enterprise has achieved a series of important successes, becoming a member of the European Community and a partner in the international market.

Eng. TRAIAN NOVOVIC  
Director of the Gheșil Refrigerator Enterprise  
Eng. DONA GHEORGHE

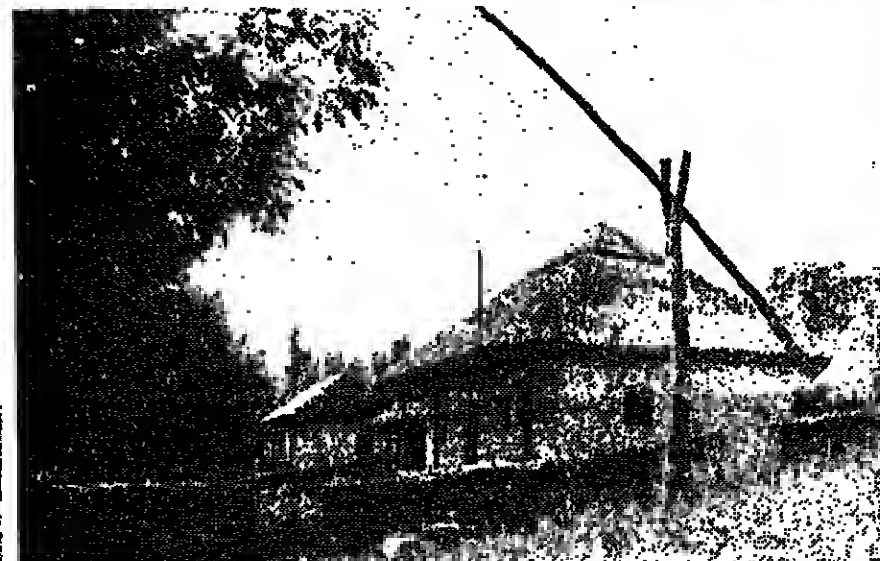


Inasmulci si polemici (Notes and Polemics) by George Calotescu, Miter-Publishing House. This book, released in the Ardeu series of the Miter-Publishing House in Bucharest, is a thematic anthology of journalistic writings by the greatest Romanian literary critic and historian: George Calotescu (1893-1968). The edition is supervised by Andrei Rusa and is meant to demonstrate the presence of the author in the great writer's work, and thus highlight a facet of his literary universe. The title of the anthology - as the editor points out - was borrowed from a column in the publication Adelphi where articles by the author of the history of Romanian literature from its origins to the present contributed for some time. Arranged in chronological

order, these notes and polemics are a true compendium for the hygiene of literary life and activity; the articles reflect a modesty polemical attitude which, however, has nothing to do with petty revenge, professional or personal. The relevant postface belongs to the late literary critic and historian Mircea Searla.



The 1937-1938 season saw the great premiere of Liol-dum's The Doors on the stage of the National Theatre in Bucharest. Directed by Silei Alexandrescu, the show reaped a great success at the



The monograph The Village Museum, by the well-known researcher of Romanian folk art, Jean Negulescu, who has been since 1987 the coordinating director of the Museum, has recently appeared in bookshops. The researcher, author of several studies in specialized magazines to the country and abroad, among which mention should be made of Study about Folk Costume and Present Settlements and Households, characterizes the interesting and original theme of the village as the very intimacy of the manufacturing process.

On this basis, going beyond the narrow limits of the laboratory on the basis of which it built the manufacturing of compression refrigerators with a capacity of 140, 180 and 240 l (Thomson-Houston, France) IGF has assimilated through its own efforts two new categories of products: compression refrigerators and refrigerating equipment, designed in an enterprise level of technical and economic excellence.

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Golden festival held in Venice. Bowing to applause were then the actors of the golden generation of Romanian drama: Grigore Vasile-Bucur, Alexandru Ciopraga, George Calotescu, Niki Atanasiu, Tudor Gheorghiu, Eugeniu Popovici, Silvia Dumitrescu-Thodet, Tani Cocen, Colla Nino and Carmen Stănescu. Now, after 30 years, actor and stage director Viorel Moldovan brings back to the stage of the same theatre, here are some of the stage director's thoughts: "Obviously, this staging has nothing to do with that of 30 years ago. The theatre keeps on changing, and so do its ways of expression, in an attempt to meet the exigencies of new generations of spectators. But master Alexandrescu insisted on the stage of putting something on stage in the past. The whole team strives to offer a suggestive image of Golden Age comedy, a vibrant action in the manners specific to his times. The brilliant cast of 30 years ago will now receive the reply of actors Mihail Fecina, Ileana Blana Ionescu, Marian Iudac, Simona Buntoc, Iana Bulea, Rodica Popescu-Illianescu, (photo above).



Polster Nicolae Tuzlari is very much in favour with critics; his record includes several exhibitions, three national prizes and an inventor's patent for a painting method replacing pigments with pencils. His images are figurative (landscapes, houses, trees, the Black Sea, the Danube) or abstract (a remarkable force directed by energetic vanishing lines which cross his compositions, creating unexpected asymmetries and having the property of focusing one's gaze within the palette). Therefore asymmetry and unity. From a chromatic point of view, the painter achieves a great density of the material, importing to the volumes an almost aggressive impetuosity which he eventually stresses to coloured greys by means of which he creates passages through unexpected contrasts, without however lapsing into expressionism. And although he uses a large number of colours, the quality of the synthesis remains dominant, although the fact that all of them follow some dominant, although his skits have the weight of the earth, his spaces always have a delicate balance of subtle chromatic rhythms. Thus, through a marked tonal of his works, Nicolae Tuzlari avoids being seduced by the natural qualities of real-life objects and imposes his own rhythm on them.



The Romanian Radio-Television's symphony season has recently been kicked off by a concert conducted by the young Cristinel Brăncuș. The programme included the Second Symphony by Johannes Brahms (the very first of the great poet Mihail Eminescu, featuring the Radio-Television Choir, directed by Aurel Gheorghiu, and actor Dan Năstă, as "refined"), the Concerto No. 3 by Beethoven (with Gavril Popov), and the Third Symphony by Johannes Brahms (with Gavril Popov).



The novel Tătăruși (The Hatchet) by the classic Romanian writer Mihail Sadoveanu will be staged by the Răspundător Românesc ensemble in Bucharest. The authors of the show hope that this will be a special opportunity for illustrating the rich folklore tradition in Upper Moldavia and the habits of the people living in that area. The folklore-inspired music was composed by Dumitru Capotanu, and the choreography was conceived by Ion Tugoreanu. A ballet novel, The Hatchet will feature Silvia Vilescu-Lipiu.

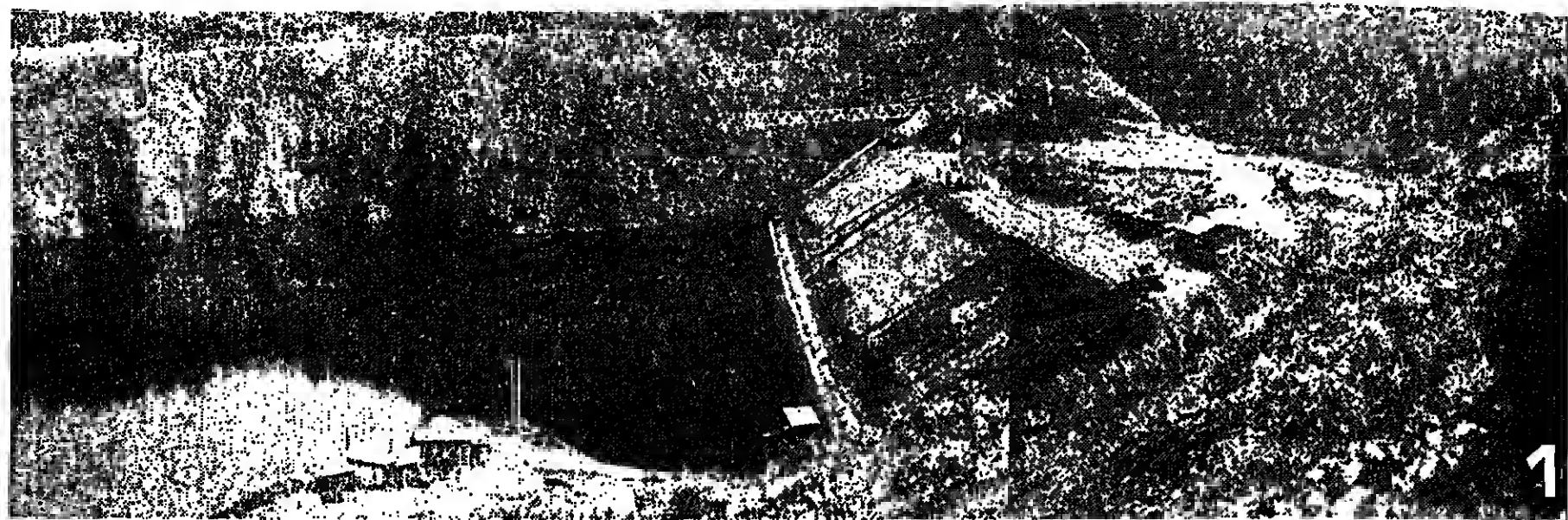


"In a continuously changing world, history lays out place and misplace on Romanian bases, naming peoples which know what they want and the authors of the show hope to make their contribution in the general human progress. It is an inspiring programme imposing the highest possible extreme in the treatment of all tasks also in the field of historical sciences" - runs the monthly Magazin Istoric in its ninth issue of 1988.

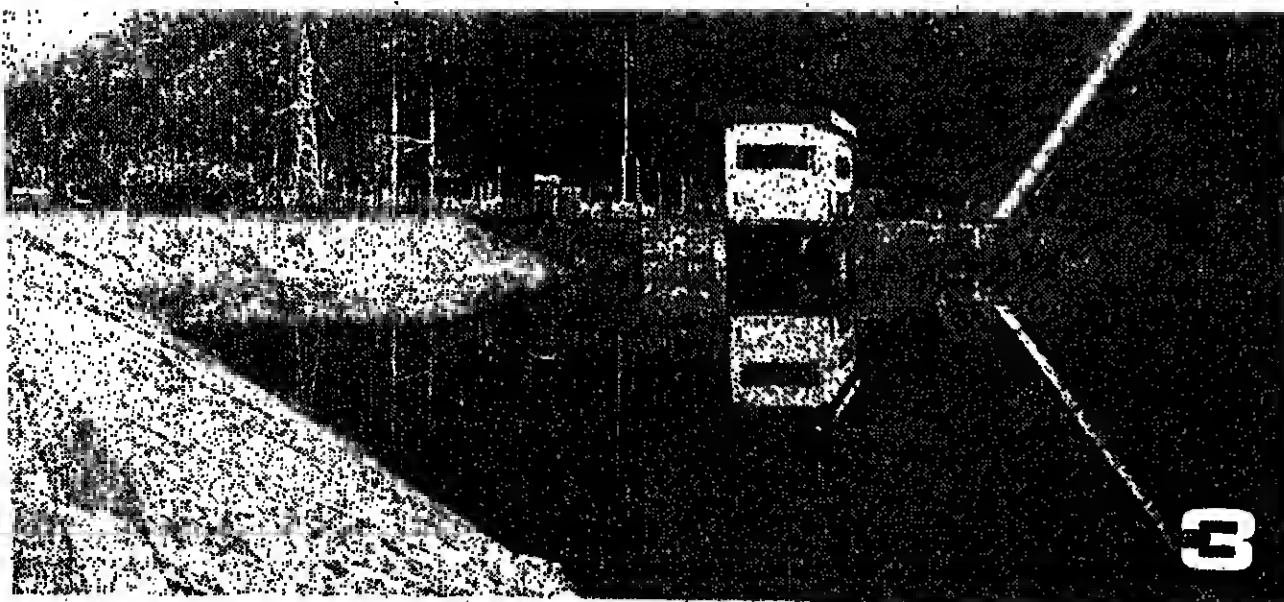
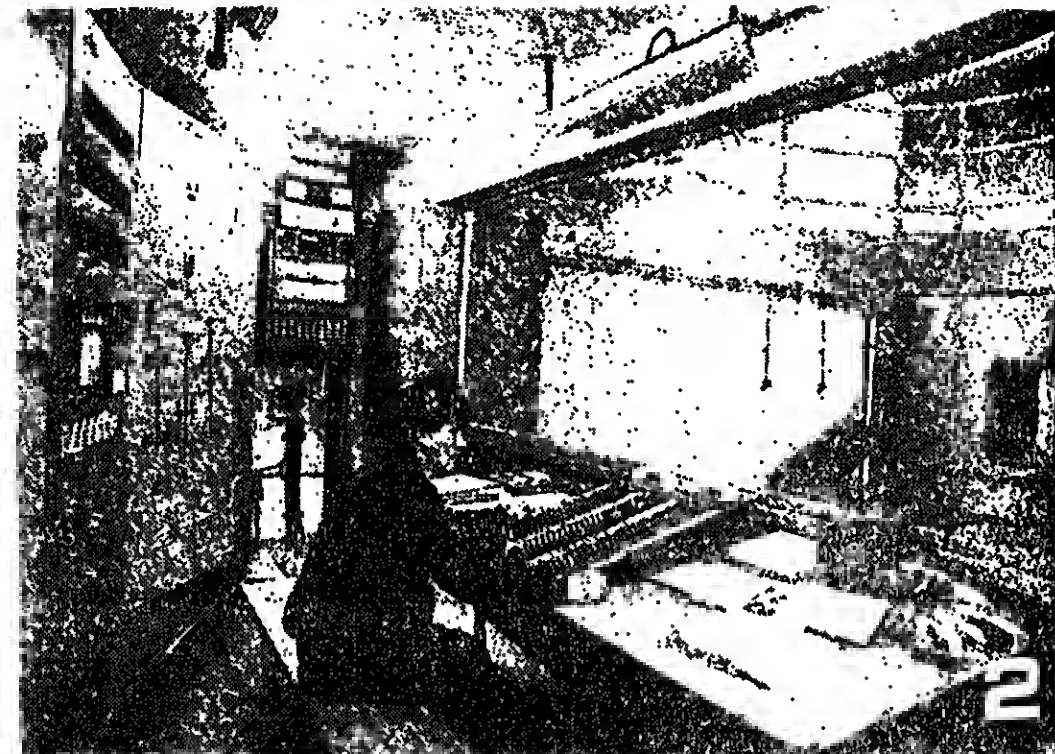
300 years after Constantin Brancovan's ascent in the throne of Wallachia, a substantial bulk of art - including the outer covers - evokes the political and cultural personality and work of the wise prince. Thus Virgil Ciocan presents the guidelines of the internal and external policy pursued by Brancovan and his counsellors to the end of serving "the interests of the Romanian land and people". Also stressed are the efforts of the Romanian ruler to provide cultural and material support to the peoples living south of the Danube and in the East. Under the title "A Day at the Ruler's Court" Panfil I. Panfil reconstructs the atmosphere of fervent political, diplomatic, artistic and cultural activity carried out at the Prince's Court in turn-of-century, which impressed extremely favourably foreign guests (some of their testimonies are included in the articles) visiting Brancovan. Gheorghe David offers readers a brief historical itinerary through several of Brancovan's establishments.

Other pages of the review are devoted to evidence of Romanian civilization and culture of this people's endurance in the ancient heart. Presenting "Romanian Justice Rules" Stefan Pasaru reveals that the evolution of ancient spirit (Romanian administrative-judicial) forces are telling proofs of the existence of Romanians in the ancient heart. Another Plamadeala comments on the writing of Transylvanian Simon Johannes Tristler The Old and New Dacia (Nürnberg, 1668), who declared that in Transylvania the Romanians were the "oldest and most numerous inhabitants of the country".





**EYEWITNESS**  
Calibita is not a new name in the Calimani mountains. It designates a rural settlement. But the village of today is not the same as it was at the beginning of the decade. What happened? For technical reasons, one of the great hydropower stations which were to harness the power potential of the area was to be built at Calibita. As the village was located in the very bed of the future storage area of the lake, most buildings were moved a few hundred metres away, onto a hill. The new Calibita has 1,350 inhabitants today. Calibita is also the name of the new hydropower plant which started generating electric power a few days ago.



**1** The dam and the storage lake. These are the most spectacular structures of the hydropower plant. The dam, which has not been completed yet, will be 80 m high and 235 m long. It is built from layers of rock (about 1,000,000 cu.m.) cut from a nearby quarry, on Ploieștena mountain. The lake will cover 320 ha and store some 4 million cu.m. of water.  
**2** The dispatching office. Here, Constantin Ilișcăanu told us that the equipment fitting the plant had been delivered by the enterprise of electrical engineering products in Ilfov and the Automobiles enterprise of Urechești. The turbine was built by the machine engineering enterprise in Itești.



**3** After the waters of the Repedea, Sălașu, Sălmăș, Ploieș and Târnăveni rivers are stored, they fall through tall cascades adding up to 18 km, drive the turbine, and flow into this lake at the foot of the mountain.  
**4** The hydropower plant at Calibita has more than just economic effects. This picturesque place where houses and the Calimani Mountains meet can be more easily visited today. With the construction of the dam, a modern road was cut into the mountains. National and local tourist bodies plan this area to become a tourist "magnet". The county travel office has initiated the construction of an elegant motel to be commissioned next year.  
**5** From the turbine room, the "heart" of the hydropower plant with an installed capacity of 21.5 MW, will annually feed into the national power grid some 47 GWh of electric power. Although it has a relatively small capacity, the first hydropower station in Ilfov is highly important for the electricity in the area. It will also supply water to Bistrița municipality and the future administrative centre, Prundu Bîrgăului.

MARIAN CONSTANTINESCU  
Photo: IULIU MARIAN



### KNITWEAR AND COMPUTERS

Nearly 90 per cent of the output of the Mioșta knitwear enterprise in Oradea is exported, which tells a lot about its renown on the foreign market. The concern with the products' quality and originally with enlarging the range of their types blends here with that of updating production and enhancing economic efficiency. In this respect, an ever more important role goes to computer technology. Photo, above: View from the enterprise's computer office.

### HOUSING UNITS

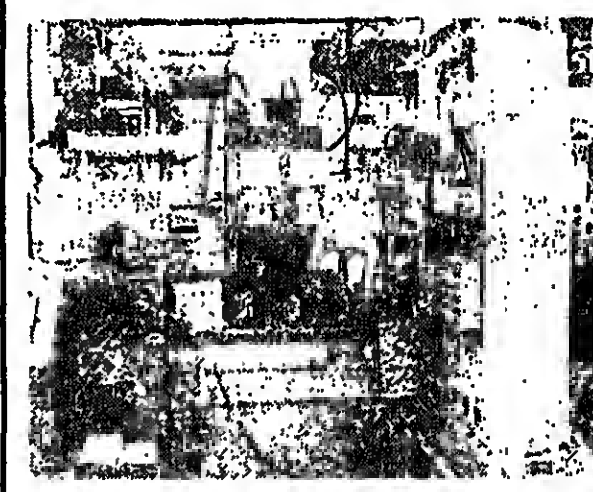
This year the construction of 1st have delivered over 1,500 apartments, by almost 300 more than the plan targets. New dwellings have been raised in the districts of Doctro, Târnăveni, Nicolae — The Heavy Equipment Works and Zăvoiaș of 1st municipality, as well as in the towns of Pătrăuș, Târnăveni and Ilfov, at Bălănești, Podu Ilfov, Târnăveni and other settlements of 1st county. Another approximately 1,500 apartments are nearing completion. In the ongoing quinquennial action 1st county has seen the rise of 7,500 apartments and many social and cultural establishments.

These days another 125 apartments have been commissioned to 1st municipality, raising the total annual of dwellings to 220 since the beginning of the year. Presently, the construction work on the Flora ensemble, as well as on the 1st blocks of flats made of rock (about 1,000,000 cu.m.) cut from a nearby quarry, on Ploieștena mountain. The lake will cover 320 ha and store some 4 million cu.m. of water.

Almost 2,500 families of 1st county have moved into new apartments since the beginning of the year. During the ongoing quinquennial the county's population has increased over 7,500 apartments, as well as numerous commercial and socio-cultural edifices.

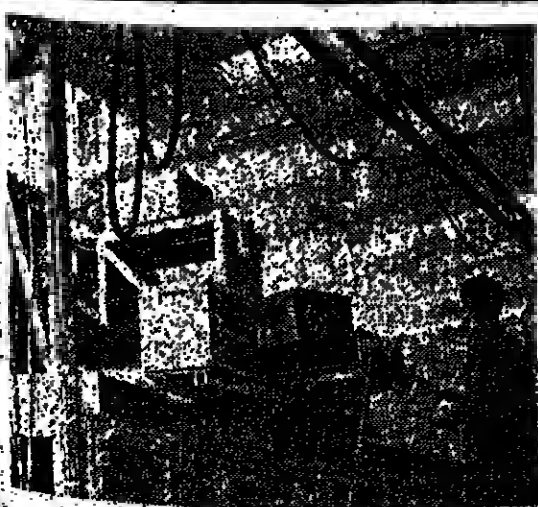
### SCIENTIFIC MEETING

The works of the 10th National Conference of Geometry and Topology were held in Suceava over October 6-8. Organized under the aegis of the Mathematical Sciences Society in Romania, in collaboration with "Al.I. Cuza" University of Iași and the School Inspectorate of the host county, this meeting was attended by many researchers, university staff, mathematicians from high and secondary schools. Sixty scientific papers were delivered. Senior high school students among whom the winners of mathematics olympiads met representatives of the Romanian school of mathematics.



### THE FOURTH CONFERENCE OF UNIVERSITY RECTORS OF BALKAN COUNTRIES

The fourth Conference of University Rectors of Balkan Countries was concluded in Bucharest on October 14. For four days, the participants debated upon the two reports presented: "Ways and Methods for Intensifying Exchanges of Scientific, Cultural and Information" and "The Preoccupation of Higher Education Institutes of Balkan Countries with Scientific, Cultural and Information". The conference has delivered important conclusions of common knowledge, the correct and objective presentation of each country's position, the understanding and rapprochement of peoples in the area.

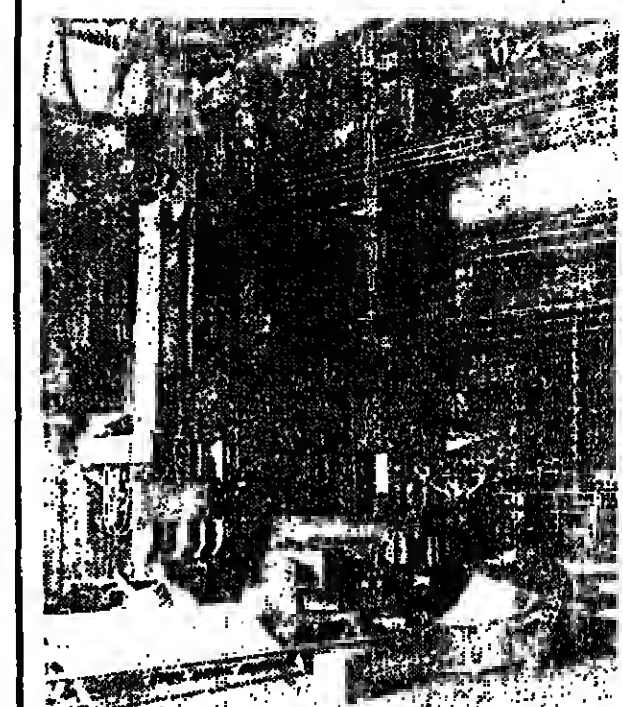


### GIRO — A FAMOUS TRADE MARK

The Giro Rotor chemical enterprise of Bucharest is well known in the world. The GIRO trade mark was registered by the International Bureau of Geneva in 1960. Today, the enterprise has delivered important quantities of complex equipment and installations for the chemical, petrochemical, food, and other industries. The enterprise's specialists, jointly with those at the specialized enterprises in Bucharest, are also concerned with researching and producing white cardboard used in the printing industry in the quinquennial process.

### NEW HIGH-TECH EQUIPMENT AT "ELECTROTEHNICA"

The Electrotehnica enterprise of Bucharest has introduced to the production line several new high-tech equipment and machine tools designed for machine engineering, 500 and 800 kW medium frequency heating and hardening generators reduce the electric power consumption by 30 per cent. The electronic control parts supplied to the installations of carbon dioxide welding ensure a better working and stability and a reduction of the consumption of copper and iron by 40 and 50 per cent respectively. At the same time a new generation of servo-motors with permanent ferrite magnets for small-capacity machine tools and robots has been assembled. These servo-motors replace the conventional motors of continuous current, substantially curtailing the consumption of raw and auxiliary materials and energy.



### EFFICIENT INSTALLATIONS

Among the most important achievements of the last period of the Machine-Tool and Aggregate Enterprise in Bucharest there are computer aided vertical lathes, installations which ensure several processing operations of great productivity. Photo above: The last check-up are effected in the mounting section on these high performance installations on a digitally controlled vertical lathe, one of this year's finds.

### AUTOMATION EQUIPMENT

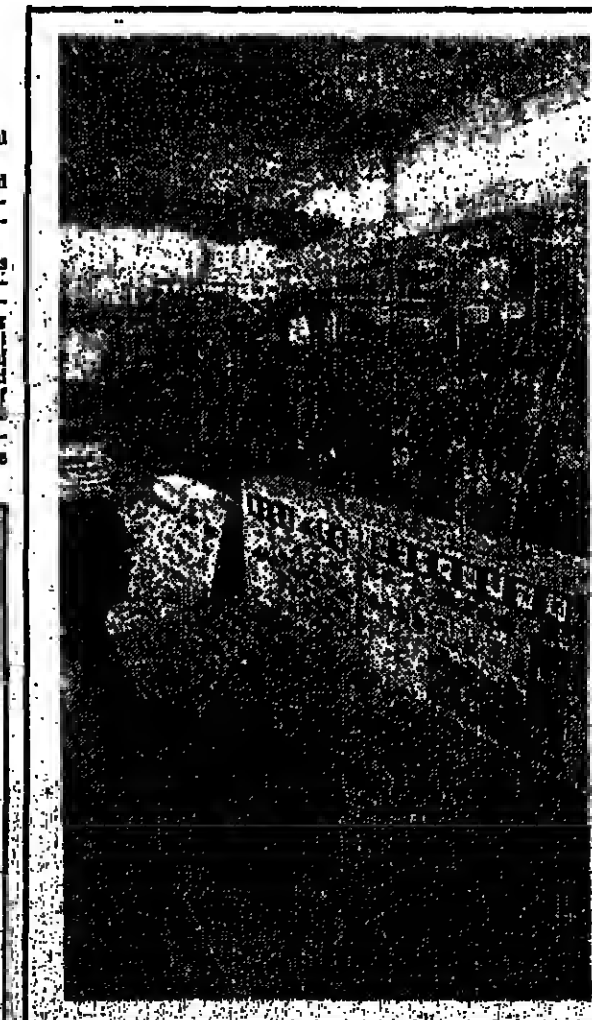
The new products introduced this year in fabrication of the Tool and Hydraulic Equipment Enterprise in Focșani represent over 40 per cent of the total value of the marketable output. Most of them are produced in small series or in unique lots, equipment and accessories needed by high performance machine-tools, processing centres, installations with high automation degree. Photo left: the automatic processing line of hydraulic distributors bodies in the hydraulic elements section.

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### HARD CARDBOARD

The latest investment at the Paper Factory in Prundu Bîrgăului commenced a unit set up in 1981 in the cardboard department, which is a new factory in itself. The newest technology — manager Vasile Moldan told us — is the installation for the manufacturing of hard cardboard (in the photo). Designed by the specialists of the Institute of Design for the Paper and Paper Industry in Brăila (the Bucharest branch) and built by two well known industrial units in Bucharest — the Enterprise of Chemical Machinery and Equipment and the Heavy Machinery Enterprise — the installation is provided with automatic drives, for obtaining in type of cardboard resistant to mechanical stress. It is used as wrapping in the furniture, light and food industries. The enterprise's specialists, jointly with those at the specialized enterprises in Bucharest, are also concerned with researching and producing white cardboard used in the printing industry in the quinquennial process.







## A FRIEND TO ANY TOURIST

COMTURIST is a foreign trade enterprise specialized in promoting sales of goods in and from Romania, with the payment in freely convertible currency, is at your disposal with a network of over 400 shops organized both in Romania's capital and in the major tourist and balneal resorts in the country. The enterprise offers its buyers over 10,000 quality products: cosmetics, drinks, cigarettes, novelties, handkerchiefs, linens, electronic and electrical household appliances, garments, footwear, interior decoration objects, cars, spare parts for cars etc.



In and through the Comturist shop network you can choose and buy goods personally, during your sojourn in Romania, by paying cash or using credit cards or traveller's cheques.

New creations, appreciated for their quality, distinguished with medals of international fairs are present next to products that make up the traditional offer in the stands of the Comturist shops.

**COMTURIST AND FASHION.** A complex offer, of the light industry, has already entered the Comturist shop network. The most successful collections of the Focșani, Bucharest, Craiova, Scornicești, Bănești, Miercurea Ciuc and Suceava garment factories can be found there.

You can purchase garments with modern designs and a great variety of colours, models, sizes for women, men and children, leather garments and cotton knitwear. Also, the "Carola" mark presents its garments with various inscriptions and drawings, in beautiful colours, metallic prints, having a modern design. Sports garments are also in great demand. The latest creation are "Joel" blue jeans, out according to the latest patterns.

Mention should be also made of wool knitwear, fabrics, leather goods, etc.

**COMTURIST - COSMETIC PRODUCTS.** The rich range of cosmetic products consisting of

traditional products like "Gerovital", "Tocoma 2", which also includes massage cream, and "Pell Amar" was completed with deodorant perfumes and soaps — "Sposun", "Cardinal" with hair fragrances, the "RO" soaps, "Nalbatex", "Nal" with skin softener, the "Violet", "Novi", "Sunny", "Sili", "Azur" soaps based upon natural essences of the lemon, mint, wild camomile, lilac, and other herbs. They are produced by the enterprises "Farmec" of Cluj Napoca and "Mira" of Bucharest. Shaving products like "Majorette", "Jollin", "Carillon" — shaving foam and after shave lotion are offered for men. There are also sham-



poes of the "Gerovital", "Wolpo" and "Crisan" ranges.

As a matter of fact, two Romanian cosmetic products were awarded the Gold Medal at the 1977 International Chemistry Fair in Bratislava last year for their quality and packaging. The "Gerovital" plant cream, made by the Farmec cosmetics enterprise in Cluj Napoca, and the "RP" soap made by the Nivea enterprise in Brașov. Those toiletries are also in great demand in the COMTURIST chain shops.

COMTURIST places at your disposal a wide range of alcoholic beverages and wines. Among them we are mentioning an assortment of "pala" brandy. One Romanian cognac including such novelties as the "Black Sea", "Tirana" and "Vintol" special cognacs. Adding to them are variously bottled and packaged village wines, from famous vineyards. "Muzicant", "Cantant", "Pahuli", "Odobesti", "Doina", "Mare", "Dobruza", etc. Also new to COMTURIST shops are the red and white sparkling wines bearing the label "Atheos", "Pele", the "Ursula" wine and the "Cluj" special beer. New champagne sorts include "NIT".

COMTURIST — The firm is

present at the ongoing edition of the Bucharest International Fair with a shop opened in pavilion 5. There you can buy recent creations in the realm of consumer goods: garments, leatherwear, footwear, knitwear, cosmetics, cigarettes, drinks. Call on the shop and you will not be disappointed. The quality of the products guarantees that.

M. CONSTANTIN

### REMEMBER!

All deliveries made by Comturist are tax free, according to the invoice submitted upon purchasing the goods.

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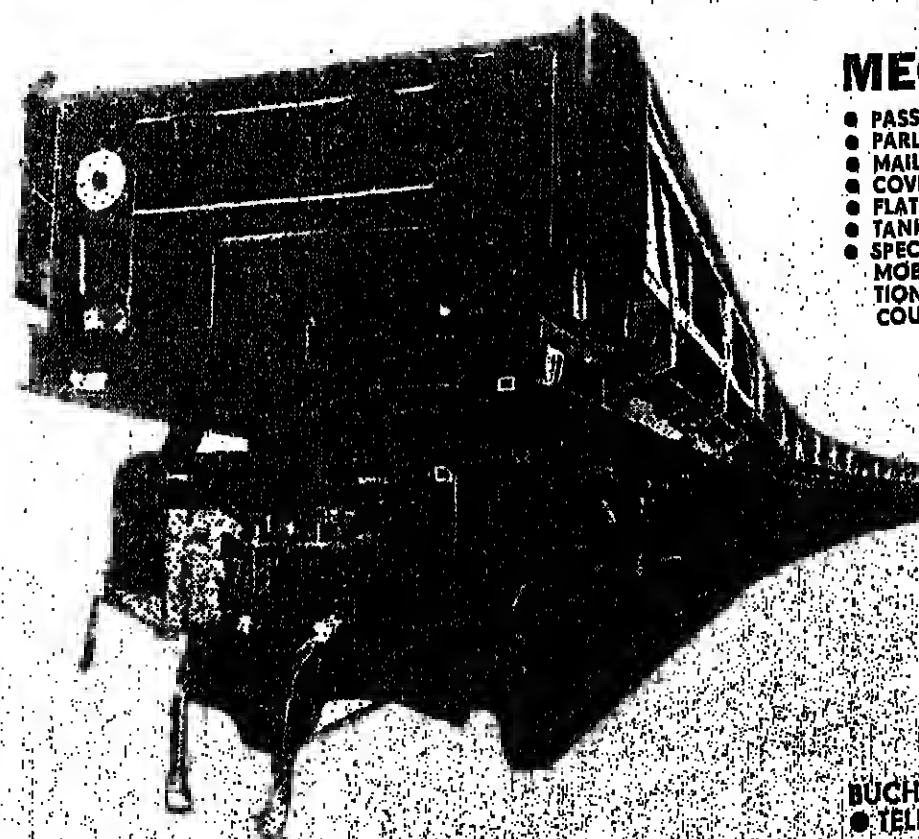
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